# State of the Alabama Workforce I

# Workforce Investment Advisory Areas



OFFICE OF WORKFORCE DEVELOPMENT



December 2005

Center for Business and Economic Research

THE UNIVERSITY OF ALABAMA

# State of the Alabama Workforce I



#### December 2005

by

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# STATE OF ALABAMA

January 24, 2006

Dear Workforce Development Partner:

On December 30, 2003, I issued Executive Order 17 creating the Office of Workforce Development and charged the Office with providing leadership to the creation of a more integrated and effective public workforce development system. Subsequently, our workforce partners developed Alabama's first comprehensive strategic plan for workforce development and immediately began implementing it. As a result of that implementation, many improvements have been made.

One such improvement has to do with our plan's goal to make our system more demanddriven. That is, we want to better respond to businesses' workforce needs. In order to do so, we must have current, reliable labor market information. We must benchmark our progress as we move forward. This first <u>State of the Workforce Report</u> provides the foundation for that effort.

As I have said many times, Alabama's workforce is its greatest economic development asset. As job skill demands escalate, we must work together to educate and train our current and future workforce to meet those demands.

I thank you for your involvement in that process and look forward to our continuing this important work.

Sincerely,

BR/sl/lm

Box P.Ly

OFFICE OF THE GOVERNOR

BOB RILEY
GOVERNOR



DR. TIM ALFORD
DIRECTOR

OFFICE OF WORKFORCE DEVELOPMENT

STATE OF ALABAMA

January 24, 2006

Dear Workforce Development Partner:

There is a growing state and national realization and consensus that workforce development equals economic development. As Alabama's unemployment shrinks and the skill demands of twenty-first century jobs expand, our workforce and economic development partners must come together to work more effectively than ever.

I am pleased to report that Alabama is doing just that! The fact that a report on workforce development is being included as part of this Economic Development Conference gives additional testimony to this trend.

I want to thank Phyllis Kennedy, Doug Dyer and the Labor Market Information staff at the Department of Industrial Relations as well as Carl Ferguson, Nisa Miranda and Sam Addy of the University of Alabama for their excellent work on the development of this initial report. I am also appreciative of the Regional Workforce Advisory Councils' input and important contributions. We will continue to work together to improve subsequent editions as we benchmark our progress in moving our state's workforce forward.

Thank you for being a part of this important initiative.

Sincerely,

Tim Alford

Director

# Acknowledgments

Completion of this project was due to the timely contributions of many people. We are very grateful to the officers, staff, and members of the following:

Alabama Department of Industrial Relations

Alabama Department of Economic and Community Affairs

Institute for Social Science Research, The University of Alabama

Job Forecasting and other Workforce Committees

Labor Market Information Division of the Alabama Department of Industrial Relations

Regional Advisory Councils of the Workforce Investment Advisory Areas

University Center for Economic Development, The University of Alabama

Many thanks also to our colleagues at the Center for Business and Economic Research for their help on different phases of this research project. Last, but not least, much gratitude is owed to the thousands of Alabamians who respond to surveys on workforce and related issues, and thereby provide the critical data required in reports of this kind.

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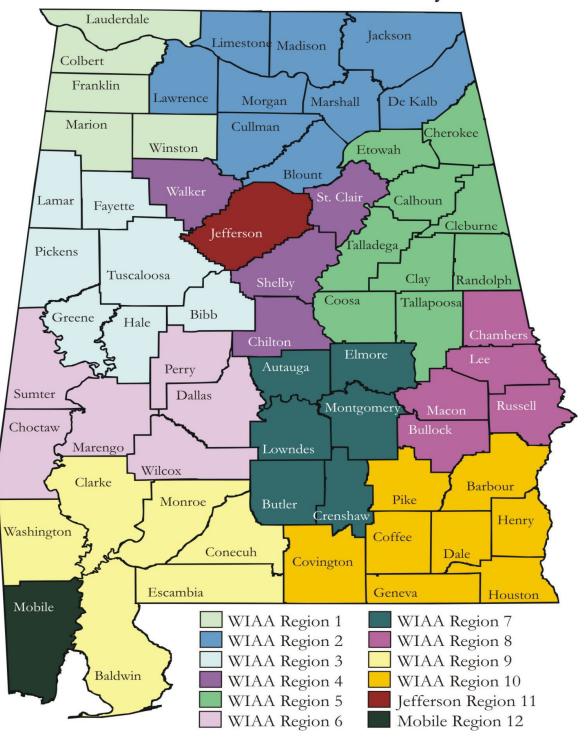
# **Executive Summary**

- This document contains state of the workforce reports for Alabama and each of the state's local workforce investment areas and workforce regional advisory council areas. For the purposes of this report, the substate workforce investment areas are referred to as workforce investment advisory areas (WIAAs). The reports analyze supply, demand, and other issues regarding the workforce for the state and each WIAA, using available metrics of workforce characteristics.
- Alabama had a low 4.2 percent unemployment rate in August 2005, with 90,217 unemployed. However, the state has a large 586,000-strong available labor pool that is looking for better jobs and includes 495,700 underemployed workers. The underemployed are willing to commute farther and longer, some for 20 or more minutes longer and 20 or more extra miles.
- In 2000, 78,200 Alabamians commuted out of the state for work, compared to 41,500 incommuters. Eighty-five percent of commuter inflow and 86 percent of outflow involved the four neighboring states; Florida, Georgia, Mississippi, and Tennessee. Georgia alone provided jobs for 51 percent of Alabama out-commuters. Significant commuting inside the state suggests that the state's roads and highways must be maintained properly to ensure uninterrupted movement of workers. Impeded movement of workers can delay or slow down economic development.
- Educational attainment in Alabama is low compared to the nation as a whole. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 80 percent and 24 percent, respectively, for the nation.
- Employment is currently growing faster than the labor force and population. Workforce development initiatives that address this challenge might consider (i) focusing on hard-to-serve populations, (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing the number of residents is generally more beneficial to communities and the state. However, communities must be prepared to invest in amenities and infrastructure to support such growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work (e.g. out-of-school youth). They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the state are manufacturing, retail trade, health care and social assistance, educational services, and accommodation and food services. These five industries provided 1,042,134 jobs about 58 percent of the state total in the second quarter of 2004. These leading employers are not the highest paying sectors; only manufacturing had wages that were above the state averages for new hires and incumbent workers.
- On average about 94,800 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged about 6,700. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.

- The top five high-demand occupations are Cashiers; Retail Salespersons; Food Preparation and Serving Workers; Waiters and Waitresses; and Laborers and Freight, Stock, and Material Movers, Hand.
- The top five fast-growing occupations are Medical Assistants; Veterinary Technologists and Technicians; Home Health Aides; Medical Records & Health Information Technicians; and Network Systems and Data Communications Analysts.
- Four occupations are both high-demand and fast-growing: Home Health Aides; Counter and Rental Clerks; Receptionists and Information Clerks; and Security Guards.
- The top 50 highest earning occupations are in health, legal, management, engineering, computer, and science fields. The top 10 are all health occupations (e.g. anesthesiologists, orthodontists, surgeons). Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 36 selected high-demand, 35 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Three occupations are both fast-growing and high-earning: Pharmacists; Computer Software Engineers, Systems Software; and Computer Software Engineers, Applications.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the lower wage leading employment sectors. Economic development should aim to diversify and strengthen the state's economy by retaining, expanding, and attracting more high-wage providing industries.
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising, strongly emphasizing the need to raise educational attainment in the state, and presenting challenges to workforce development. They also present opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the state. Raising personal income by improving educational attainment for a state that has low population and labor force growth rates is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified state economy. Indeed, one cannot achieve success without the other.

# Alabama Workforce Report

# Workforce Investment Advisory Areas



# Alabama Workforce Report

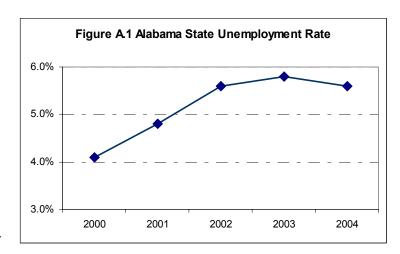
## **Workforce Supply**

#### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table A.1 shows labor force information for Alabama and each workforce investment advisory area (WIAA) in the state for 2004 and August 2005.<sup>1</sup>

Significant employment gains relative to labor force growth in 2005 have lowered unemployment rates for the state and all WIAAs. Unemployment rates in 2004 ranged between 4.2 percent and 9.2 percent for the WIAAs, with 5.6 percent for the state. The August 2005 range for unemployment was 3.2 percent to 7.9 percent, with a 4.2 percent rate for the state. The unemployment rate was lowest in WIAA Region 4 and highest in Region 6. The nine-county Region 2 area has the largest labor force and the second smallest unemployment rate. WIAA Region 6, with the smallest labor force, has the highest unemployment rate.

Annual state unemployment rates for 2000 to 2004 are shown in Figure A.1. Unemployment rose from 4.1 percent in 2000 when the labor market statewide and nationwide was tight. The higher 2001-2003 rates reflect the effects of the national economic recession of 2001. Employment gains since 2003 have sent unemployment downward. A 20,000-job increase in the state's employment was recorded for 2004. An even higher job gain is expected for 2005. Monthly labor force data for 2005 suggest that a sharper decline in the state unemployment rate will be recorded for 2005.



Source: Alabama Department of Industrial Relations.

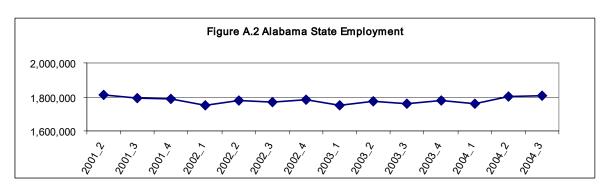
Alabama employment averaged a little less than 1.8 million quarterly from the second quarter of 2001 to third quarter 2004 (Figure A.2). The low point was recorded in the first quarter of 2003 but Table A.1 shows that employment has recovered strongly and currently exceeds 2.0 million. Employment refers to the number of full-time and part-time jobs. Economic activity is spurring employment growth and this is expected to continue for the next couple of years.

<sup>&</sup>lt;sup>1</sup> Alabama labor force information is available from the Labor Market Information (LMI) Division of the Alabama Department of Industrial Relations. LMI compiles labor data in cooperation with the U.S. Bureau of Labor Statistics.

Table A.1 Alabama Labor Force Information

_		2004	·	
	Labor Force	Employed	Unemployed	Rate
WIAA Region 1 Area	103,970	97,090	6,880	6.62%
WIAA Region 2 Area	430,908	408,993	21,915	5.09%
WIAA Region 3 Area	126,320	119,505	6,815	5.40%
WIAA Region 4 Area	172,662	165,493	7,169	4.15%
WIAA Region 5 Area	199,131	187,171	11,960	6.01%
WIAA Region 6 Area	43,401	39,421	3,980	9.17%
WIAA Region 7 Area	181,994	171,601	10,393	5.71%
WIAA Region 8 Area	113,192	107,106	6,086	5.38%
WIAA Region 9 Area	121,671	114,244	7,427	6.10%
WIAA Region 10 Area	149,604	141,636	7,968	5.33%
Jefferson Region	325,242	308,135	17,107	5.26%
Mobile Region	180,685	168,929	11,756	6.51%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
_	Labor Force	2005 August	I I no man love of	Date
=		Employed	Unemployed	Rate
WIAA Region 1 Area	104,515	99,611	4,904	4.69%
WIAA Region 2 Area	433,202	416,941	16,261	3.75%
WIAA Region 3 Area	128,357	123,294	5,063	3.94%
WIAA Region 4 Area	172,558	167,042	5,516	3.20%
WIAA Region 5 Area	197,998	189,327	8,671	4.38%
WIAA Region 6 Area	42,361	39,005	3,356	7.92%
WIAA Region 7 Area	184,378	176,517	7,861	4.26%
WIAA Region 8 Area	112,896	107,836	5,060	4.48%
WIAA Region 9 Area	122,576	117,316	5,260	4.29%
WIAA Region 10 Area	149,369	143,530	5,839	3.91%
Jefferson Region	324,901	311,018	13,883	4.27%
Mobile Region	182,636	174,094	8,542	4.68%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **Commuting Patterns**

In 2000, more Alabamians commuted out of the state for work than those who commuted in (Table A.2). Commuter outflow exceeded inflow by about 36,700 people. Most of the commuting involved the four neighboring states; Florida, Georgia, Mississippi, and Tennessee. These states accounted for 85 percent or about 35,000 of the inflow and 86 percent (67,000) of the outflow. Georgia alone provided jobs for 51 percent of the out-commuters. About 1,000 of those who commuted out went to other countries.

There was significant commuting inside the state as well. Table A.2 also shows the one-way average commute time and distance for Alabama workers in 2004.<sup>2</sup> The one-way

**Table A.2 Commuting Patterns** 

Area	Inflow,	Inflow, 2000			, 2000	
	Number	Percent		Number	Percent	
Alabama	41,494	100.0		78,197	100.0	
	Average com	mute time	(o	ne-way), 2004	1	
				Percent of	workers	
Less	than 20 minut	tes		57.	.3	
20 to	to 40 minutes 27.0					
40 n	ninutes to an h	our		9.3		
Mor	e than an hour	:		1.7		
Average commute distance (one-way), 2004						
				Percent of	workers	
Less	than 10 miles			45.9		
10 to	o 25 miles			29.5		
25 to	o 45 miles		13.7			
More	e than 45 miles			6.	.1	

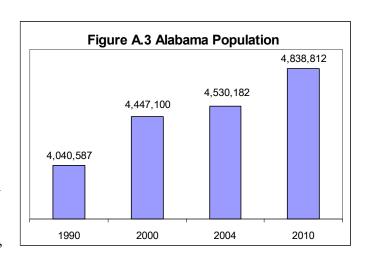
Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

commute takes less than 20 minutes for 57 percent of workers; between 20 and 40 minutes for 27 percent; and more than 40 minutes for 11 percent. Nearly 2 percent of workers spend more than an hour to get to work. The commute is less than 10 miles for 46 percent of workers and almost 30 percent travel 10 to 25 miles. About 20 percent of workers travel more than 25 miles one-way, with 6 percent exceeding 45 miles. This commuting data suggest that the state's roads and highways must be maintained properly to ensure uninterrupted movement of workers. Impeded movement of workers can delay or slow economic development.

#### **Population**

The Alabama population estimate of about 4.5 million for 2004 is 1.9 percent higher than was recorded for 2000 (Figure A.3 and Table A.3). Population grew faster for four WIAAs than for the state, but population also shrank in four regions. The state population is projected to grow 8.8 percent in this decade to more than 4.8 million by 2010. Population growth in five WIAAs should beat the state's rate. WIAA Region 6 is expected to see its population fall. This may shrink its labor force. If employment growth continues its fast pace,



<sup>&</sup>lt;sup>2</sup> The 2004 commuting data is obtained from a study on underemployment that was commissioned by the state's LMI.

it could reverse the net out-commuting mentioned in the previous section. Communities that experience rapid job gains may need to consider investments in amenities and infrastructure to attract new residents.

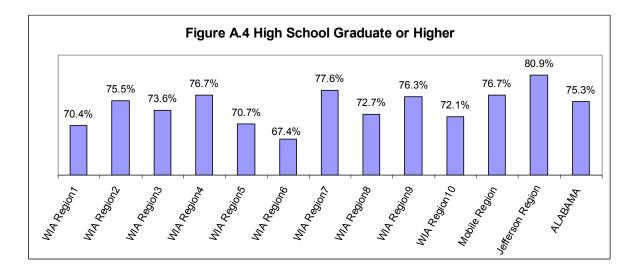
Table A.3 Population by WIAA

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
WIAA Region 1	211,024	230,230	227,904	-1.0	246,645	7.1
WIAA Region 2	704,743	817,359	849,802	4.0	923,527	13.0
WIAA Region 3	247,125	268,208	270,091	0.7	285,147	6.3
WIAA Region 4	249,495	318,341	347,393	9.1	391,772	23.1
WIAA Region 5	405,276	424,451	423,859	-0.1	443,826	4.6
WIAA Region 6	129,733	124,668	120,827	-3.1	120,843	-3.1
WIAA Region 7	355,127	381,592	389,555	2.1	421,387	10.4
WIAA Region 8	206,852	237,250	239,951	1.1	265,258	11.8
WIAA Region 9	215,754	263,232	277,543	5.4	311,023	18.2
WIAA Region 10	299,715	319,879	324,236	1.4	337,567	5.5
Mobile Region	378,643	399,843	400,526	0.2	417,520	4.4
Jefferson Region	651,525	662,047	658,495	-0.5	673,771	1.8
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Alabama residents who are 25 years old and over is shown below in Table A.4 and Figures A.4 and A.5. About 75 percent graduated from high school and 19 percent hold a bachelor's or higher degree. The Jefferson WIAA has the highest educational attainment and WIAA Region 6 has the lowest. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



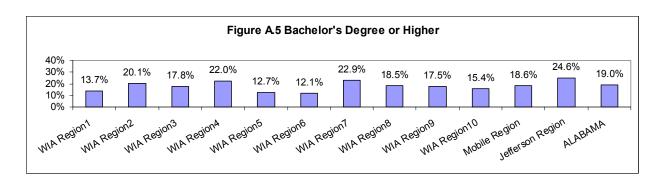


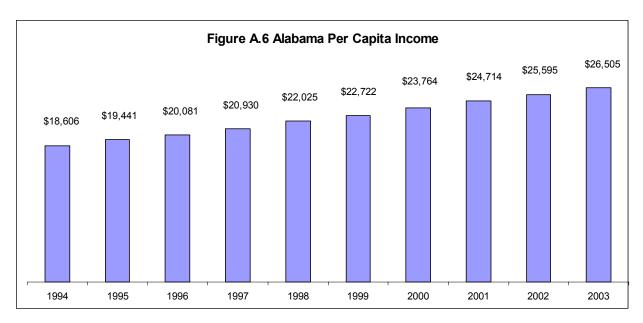
Table A.4 Educational Attainment in 2000, Population 25 Years and Over

	WIA Region1	WIA Region2	WIA Region3	WIA Region4	WIA Region5	WIA Region6	WIA Region7
Total	155,827	539,695	166,247	211,107	284,419	77,325	243,326
No schooling completed	1,967	5,681	2,727	2,182	3,544	1,947	2,931
Nursery to 4th grade	1,462	4,358	1,664	1,210	2,224	1,338	1,764
5th and 6th grade	4,382	12,733	3,606	4,132	7,012	2,555	4,103
7th and 8th grade	9,524	25,316	7,197	9,095	15,052	3,708	8,314
9th grade	7,873	22,357	6,669	8,303	14,254	3,318	7,985
10th grade	8,593	24,885	8,076	8,911	16,329	3,687	9,447
11th grade	6,614	20,200	6,892	7,826	13,689	3,864	9,382
12th grade, no diploma	5,725	16,680	7,131	7,550	11,365	4,761	10,594
High school graduate/equivalent	52,095	157,708	52,471	62,503	94,864	25,919	68,487
Some college, less than 1yr	9,904	36,770	9,939	13,275	17,925	4,317	16,590
Some college, 1+ yrs, no degree	19,455	73,529	21,692	29,018	37,586	8,889	35,797
Associate degree	6,928	30,740	8,589	10,712	14,555	3,677	12,120
Bachelor's degree	13,356	71,882	17,921	31,427	21,857	5,839	34,720
Master's degree	5,524	27,777	7,916	10,466	10,256	2,489	15,506
Professional school degree	1,616	5,493	1,909	3,140	2,844	789	3,879
Doctorate degree	809	3,586	1,848	1,357	1,063	228	1,707
	WIA	WIA	WIA	Mobile	Jefferson		
	Region8	Region9	Region10	Region	Region	Alabama	
Total	140,299	175,070	209,805	250,122	434,158	2,887,400	
No schooling completed	2,068	1,974	3,493	3,033	4,227	35,774	
Nursery to 4th grade	1,476	1,147	2,309	1,564	1,708	22,224	
5th and 6th grade	3,636	3,292	5,435	3,279	5,904	60,069	
7th and 8th grade	5,941	6,149	10,663	8,846	12,461	122,266	
9th grade	5,405	6,226	8,973	7,988	11,360	110,711	
10th grade	7,040	7,621	9,861	10,421	13,932	128,803	
11th grade	6,181	7,189	9,311	10,826	14,635	116,609	
12th grade, no diploma	6,517	7,890	8,423	12,266	18,723	117,625	
High school graduate/equivalent	41,186	57,662	63,266	79,822	121,233	877,216	
Some college, less than 1yr	8,737	11,262	15,037	16,388	27,914	188,058	
Some college, 1+ yrs, no degree	18,205	24,531	27,879	35,788	70,628	402,997	
Associate degree	7,904	9,518	12,821	13,276	24,600	155,440	
Bachelor's degree	14,740	19,595	21,070	30,499	68,866	351,772	
Master's degree	7,285	7,906	8,262	10,782	23,560	137,729	
Professional school degree	1,508	2,247	2,284	3,586	10,532	39,827	
Doctorate degree	2,470	861	718	1,758	3,875	20,280	

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### Per Capita Income

Per capita income (PCI) in Alabama was at \$26,505 in 2003 (Figure A.6), up by about 42.5 percent from 1994. The Jefferson WIAA had the highest PCI with \$34,323 followed by Region 4 with \$28,495; Regions 2 and 7 also had higher PCIs than the Alabama state average. WIAA Region 6 had the lowest PCI with \$20,844.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

#### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

State of the Alabama Workforce I

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

The Alabama underemployment rate was 24 percent in 2004. Applying this rate to August 2005 labor force data means that about 495,700 employed Alabama residents were underemployed (Table A.5). Adding the unemployed gives a total available labor pool of about 586,000 for the state. This pool is about 6.5 times the number of unemployed and is a more realistic measure of the available labor in the state. However, prospective employers must be able to offer the underemployed higher wages, better benefits or terms of employment, or some other incentives to induce them to change jobs. Among the WIAAs, the underemployment rate ranges from 19.4 percent for Region 1 to 28.5 percent for Region 6. WIAA Region 2 has the highest available labor, followed by Jefferson. These two areas account for a third of the state's available labor pool.

Table A.5 Underemployed and Available Labor by WIAA

	<u>Alabama</u>	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6
Labor Force	2,155,745	104,515	433,202	128,357	172,558	197,998	42,361
Employed	2,065,528	99,611	416,941	123,294	167,042	189,327	39,005
Underemployment rate	24.0%	19.4%	21.7%	26.2%	25.2%	23.6%	28.5%
Underemployed workers	495,727	19,325	90,476	32,303	42,095	44,681	11,116
Unemployed	90,217	4,904	16,261	5,063	5,516	8,671	3,356
Available labor pool	585,944	24,229	106,737	37,366	47,611	53,352	14,472
	Region 7	Region 8	Region 9	Region 10	<u>Jefferson</u>	<u>Mobile</u>	
Labor Force	184,378	112,896	122,576	149,369	324,901	182,636	
Employed	176,517	107,836	117,316	143,530	311,018	174,094	
Underemployment rate	26.8%	26.6%	22.8%	22.2%	22.5%	24.6%	
Underemployed workers	47,307	28,684	26,748	31,864	69,979	42,827	
Unemployed	7,861	5,060	5,260	5,839	13,883	8,542	
Available labor pool	55,168	33,744	32,008	37,703	83,862	51,369	

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

#### **Industry Mix**

The manufacturing sector was the leading employer with about 292,200 jobs in the second quarter of 2004 (Table A.6). Rounding up the top five industries by employment are retail trade, health care and social assistance, educational services, and accommodation and food services. These five industries provided 1,042,134 jobs, about 58 percent of the state total.

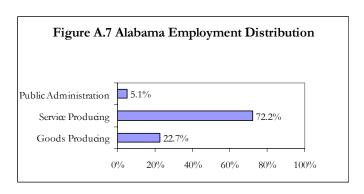
Table A.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Average Monthly Wage	Average Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	13,519	0.8%	18	\$2,284	\$1,825
21 Mining	7,422	0.4%	20	\$4,669	\$3,885
22 Utilities	20,151	1.1%	16	\$4,438	\$2,820
23 Construction	96,164	5.3%	6	\$2,846	\$2,281
31-33 Manufacturing	292,193	16.2%	1	\$3,288	\$2,410
42 Wholesale Trade	79,770	4.4%	10	\$3,582	\$2,713
44-45 Retail Trade	237,183	13.2%	2	\$1,929	\$1,393
48-49 Transportation and Warehousing	53,503	3.0%	12	\$2,848	\$2,312
51 Information	32,206	1.8%	14	\$3,471	\$3,268
52 Finance and Insurance	74,021	4.1%	11	\$3,626	\$3,047
53 Real Estate and Rental and Leasing	26,554	1.5%	15	\$2,459	\$1,754
54 Professional, Scientific, and Technical Services	91,886	5.1%	9	\$4,152	\$3,207
55 Management of Companies and Enterprises	11,167	0.6%	19	\$3,517	\$2,932
56 Administrative and Support and Waste Management and Remediation Services	95,365	5.3%	7	\$1,980	\$1,557
61 Educational Services	160,179	8.9%	4	\$2,577	\$1,252
62 Health Care and Social Assistance	210,009	11.7%	3	\$2,697	\$1,999
71 Arts, Entertainment, and Recreation	16,537	0.9%	17	\$1,574	\$1,156
72 Accommodation and Food Services	142,570	7.9%	5	\$1,162	\$854
81 Other Services (except Public Administration)	48,523	2.7%	13	\$2,048	\$1,610
92 Public Administration	92,230	5.1%	8	\$2,747	\$1,660
ALL INDUSTRIES	1,801,152	100.0%		\$2,700	\$2,197

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

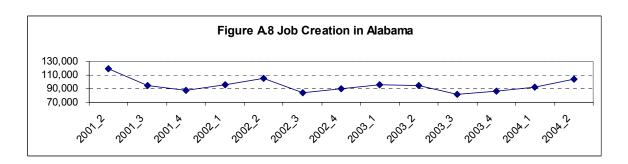
The average monthly wage across all industries in the state was just about \$2,700. New hire monthly earnings roughly averaged \$2,200 or 81 percent of the average monthly wage. The highest average monthly wages were for mining at \$4,669, utilities \$4,438, and professional, scientific, and technical services \$4,152. Accommodation and food services paid the least at \$1,162. Mining also had the highest average monthly new hire wages with \$3,885. Information was next with \$3,268 followed closely by professional, scientific, and technical services with \$3,207. Accommodation and food services paid the least with \$854.

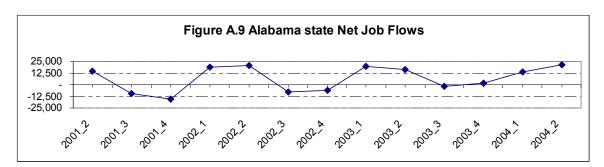
The leading employers are not the highest paying sectors. Indeed, of the top five employers, only manufacturing paid wages above the state averages. The smallest employer, mining, paid the highest wages. By broad industry classification, service producing industries provided 72 percent of total state jobs in second quarter 2004. Goods producing industries were next with about 23 percent and public administration 5 percent. The distribution is for all jobs and there is significant variation by WIAA.



#### Job Creation and Net Job Flows

On average, about 94,800 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure A.8 shows a downward trend for job creation over the period, but a clear turnaround since the third quarter of 2003. Quarterly net job flows averaged about 6,700 in the same period and follows the job creation trend (Figure A.9). Net job flows have ranged from a loss of about 15,400 to a gain of almost 21,900. Net job flows clearly fluctuate greatly but 2005 hiring activity is quite encouraging. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table A.7 shows the top 36 of more than 700 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; retail trade; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the state. The top five high-demand occupations are Cashiers; Retail Salespersons; Food Preparation and Serving Workers; Waiters and Waitresses; and Laborers and Freight, Stock, and Material Movers, Hand.

Table A.7 Selected High-Demand Occupations (Base Year 2002 and Projected Year 2012)

	Annual Average Job Openings				
Occupation	Total	Due to Growth	Due to Separations		
Cashiers	3,990	765	3,225		
Retail Salespersons	3,320	835	2,485		
Food Preparation and Serving Workers	2,610	845	1,765		
Waiters and Waitresses	2,475	550	1,925		
Laborers and Freight, Stock, and Material Movers, Hand	1,835	200	1,635		
Registered Nurses	1,615	850	765		
Office Clerks, General	1,595	510	1,085		
General and Operations Managers	1,540	600	940		
Truck Drivers, Heavy and Tractor-Trailer	1,370	735	635		
Janitors and Cleaners, Except Maids	1,075	460	615		
Sales Representatives, Except Technical and Scientific Products	1,060	475	585		
Bookkeeping, Accounting, and Auditing Clerks	1,020	290	730		
First-Line Supervisors of Retail Sales Workers	1,015	430	585		
Teacher Assistants	985	490	495		
Secretaries, Except Legal, Medical, and Executive	980	155	825		
Customer Service Representatives	900	490	410		
Nursing Aides, Orderlies, and Attendants	890	530	360		
Maids and Housekeeping Cleaners	880	460	420		
Child Care Workers	830	315	515		
Team Assemblers	820	280	540		
Elementary School Teachers, Except Special Education	815	375	440		
Licensed Practical and Licensed Vocational Nurses	800	370	430		
Security Guards **	725	390	335		
Maintenance and Repair Workers, General	720	315	405		
Receptionists and Information Clerks **	695	370	325		
First-Line Supervisors of Office and Administrative Support Workers	675	210	465		
Secondary School Teachers, Except Special Education	625	250	375		
Landscaping and Groundskeeping Workers	590	225	365		
Automotive Service Technicians and Mechanics	575	205	370		
Accountants and Auditors	560	235	325		
Cooks, Institution and Cafeteria	545	180	365		
Packers and Packagers, Hand	540	250	290		
Carpenters	530	245	285		
Tellers	515	120	395		
Electricians	495	265	230		
Counter and Rental Clerks **	475	205	270		

Note: A minimum of 475 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

#### **Fast-Growing Occupations**

The top 35 of occupations ranked by projected growth of employment are listed in Table A.8. Many of these occupations are health or computer related. The top five high growth occupations are Medical Assistants; Veterinary Technologists and Technicians; Home Health Aides; Medical Records and Health Information Technicians; and Network Systems & Data Communications Analysts. A comparison of Tables A.7 and A.8 identifies three occupations that are both high-demand and fast-growing: Counter and Rental Clerks; Receptionists and Information Clerks; and Security Guards. Home Health Aides with 465 annual job openings can be added to this group.

Table A.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

The control of the co			,		Total
	Emplo	yment	Percent	Annual Growth	Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Medical Assistants	3,410	5,160	51.3	4.23	240
Veterinary Technologists and Technicians	610	910	49.2	4.08	40
Home Health Aides **	7,480	11,140	48.9	4.06	465
Medical Records and Health Information Technicians	2,280	3,330	46.1	3.86	140
Network Systems and Data Communications Analysts	1,410	2,050	45.4	3.81	80
Personal and Home Care Aides	3,880	5,490	41.5	3.53	220
Computer Software Engineers, Systems Software	2,440	3,430	40.6	3.46	125
Computer Software Engineers, Applications	3,260	4,560	39.9	3.41	160
Counselors, Social, and Religious Workers, All Other	3,180	4,420	39.0	3.35	185
Dental Hygienists	2,170	3,010	38.7	3.33	105
Dental Assistants	3,030	4,190	38.3	3.29	200
Fitness Trainers and Aerobics Instructors	2,100	2,900	38.1	3.28	130
Social and Human Service Assistants	3,820	5,240	37.2	3.21	205
Residential Advisors	620	850	37.1	3.21	40
Database Administrators	860	1,170	36.0	3.13	40
Physical Therapist Assistants	890	1,210	36.0	3.12	45
Aircraft Mechanics and Service Technicians	3,380	4,560	34.9	3.04	200
Emergency Medical Technicians and Paramedics	2,870	3,850	34.1	2.98	135
Preschool Teachers, Except Special Education	4,790	6,410	33.8	2.96	230
Public Relations Managers	2,330	3,110	33.5	2.93	120
Occupational Therapists	810	1,080	33.3	2.92	35
Paralegals and Legal Assistants	1,840	2,450	33.2	2.90	75
Directors, Religious Activities and Education	3,300	4,330	31.2	2.75	140
Veterinary Assistants and Laboratory Animal Caretakers	1,410	1,850	31.2	2.75	70
Pharmacists	3,950	5,180	31.1	2.75	200
Network and Computer Systems Administrators	2,120	2,780	31.1	2.75	90
Desktop Publishers	580	760	31.0	2.74	35
Computer Support Specialists	5,690	7,410	30.2	2.68	240
Physical Therapists	1,490	1,940	30.2	2.67	60
Security Guards **	13,140	17,060	29.8	2.65	725
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	5,740	7,450	29.8	2.64	245
Manufactured Building and Mobile Home Installers	720	930	29.2	2.59	40
Counter and Rental Clerks **	7,100	9,160	29.0	2.58	475
Pharmacy Technicians	4,020	5,180	28.9	2.57	165
Construction Trades and Related Workers, All Other	1,030	1,320	28.2	2.51	45
Self-Enrichment Education Teachers	640	820	28.1	2.51	30
Receptionists and Information Clerks **	13,190	16,880	28.0	2.50	695

Note: Selection criteria were a minimum of 30 average annual job openings and at least 2.50 percent annual growth rate. Employment level data are rounded to the nearest 10 and job openings data are rounded to nearest 5.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations. Home Health Aides missed Table A.7 by just 10 average annual job openings. Source: Alabama Department of Industrial Relations.

#### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table A.9 shows 50 selected highest earning Alabama occupations. In general, the selected highest earning occupations are in health, legal, management, engineering, computer, and science fields. The top 10 are all health occupations.

The selected high-earning occupations are generally not fast-growing or high-demand. Only one high-earning occupation, General and Operations Managers, is in the high-demand category. The following three occupations are both fast-growing and high-earning: Pharmacists; Computer Software Engineers, Systems Software; and Computer Software Engineers, Applications.

#### Other Workforce Issues

#### Available Labor

Employment is a critical input to economic development. As such, the availability of labor is very important. Alabama currently has a low unemployment rate, but there is a large available labor pool, 586,000-strong, that is looking for better jobs, typically higher-wage ones. This pool is made up of 90,217 unemployed and 495,727 underemployed.

The underemployed component of the state's available labor pool consists of people who are willing to commute farther and longer, some for 20 or more minutes longer and 20 or more extra miles. A lack of job opportunities in their areas, low wages at available jobs, and living too far from those jobs are the primary reasons given for being underemployed. Ongoing economic development efforts will help in this regard.

People who do not work also cite lack of job opportunities in their areas as one major reason for not working. Such workers may become part of the labor force if that problem can be addressed. Thus the state's available labor force could be bigger than estimated in this report. Employment seems to be growing faster than the labor force. Higher employment demand could be alleviated somewhat with in-commuting. However, availability of jobs presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than incommuting.

Immigration is one way of growing the labor force through growth in the population. The state's population growth rate is low relative to the nation's rate and this is expected to continue through 2010. This low population growth rate may hinder the ability to meet the expected jobs demand barring future economic slowdowns. Another strategy to expand the labor force to meet this demand is to focus on hard-to-serve populations.

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Table A.9 Selected High-Earning Occupations

Occupation	Employment	Mean Annual Salary (\$)
Anesthesiologists	NA	196,980
Orthodontists	NA	192,590
Oral and Maxillofacial Surgeons	NA	182,060
Surgeons	720	180,860
Obstetricians and Gynecologists	340	176,010
Internists, General	720	169,750
Family and General Practitioners	1,010	146,370
Pediatricians, General	730	144,580
Podiatrists	NA	142,670
Psychiatrists	160	137,200
Chief Executives	3,640	135,300
Dentists, General	610	134,410
Law Teachers, Postsecondary	90	111,970
Lawyers	5,550	106,930
Administrative Law Judges, Adjudicators, and Hearing Officers	110	103,560
Engineering Managers	2,800	96,200
Physicists	170	93,970
Computer and Information Scientists, Research	340	90,460
Natural Sciences Managers	210	88,800
Personal Financial Advisors	1,000	88,050
General and Operations Managers	26,270	85,820
Aerospace Engineers	2,800	
Mathematicians	10	84,340
Pharmacists	4,300	83,370
Actuaries	7,500 NA	83,080
	340	82,680
Chiropractors	270	82,510
Optometrists Real Estate Brokers		81,810
	170	81,720
Air Traffic Controllers	230	81,250
Computer and Information Systems Managers	2,790	81,080
Health Specialties Teachers, Postsecondary	1,260	80,930
Marketing Managers	1,390	79,440
Computer Hardware Engineers	930	79,410
Sales Managers	2,970	78,960
Electronics Engineers, Except Computer	2,020	78,690
Securities, Commodities, and Financial Services Sales Agents	1,940	78,460
Environmental Engineers	810	76,960
Computer Software Engineers, Systems Software	2,400	76,790
Chemical Engineers	600	76,500
Materials Scientists	40	76,130
Financial Managers	4,950	76,000
Airline Pilots, Copilots, and Flight Engineers	280	74,870
Materials Engineers	370	73,380
Atmospheric and Space Scientists	140	73,010
Medical and Health Services Managers	2,740	72,930
Electrical Engineers	3,130	72,900
Purchasing Managers	870	72,490
Engineering Teachers, Postsecondary	800	72,320
Petroleum Engineers	20	71,910
Computer Software Engineers, Applications	3,470	71,700

Note: Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment and salaries data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

Hard-to-serve populations include persons in poverty, those receiving welfare, those in sparsely populated areas, and those on active parole. These populations are often outside of the mainstream economy and poor (e.g. out-of-school youth). They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. They are a potential human resource and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource. WIAA Region 6 may be one such area.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table A.10 shows the percentage of selected occupations in Alabama that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table A.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. However, science is primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for critical thinking, complex problem solving, and systems skills. These skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the state are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Medical Assistants; Veterinary Technologists and Technicians; and Home Health Aides. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in Alabama is low compared to the nation as a whole. Seventy-five percent of Alabamians age 25 and over have graduated from high school, compared to 80.4 percent for the nation. Of that population, 19 percent of Alabamians have bachelor's or higher degree; 24.4 percent of Americans do. The Jefferson WIAA has the highest educational attainment level in the state, 81 percent high school graduates and 25 percent bachelor's or higher degree holders. Skill and education requirements for jobs keep rising. This highlights a strong need to raise educational attainment in the state.

Table A.11 shows the number of selected occupations in Alabama for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. A postsecondary educational attainment is the minimum education and training requirement for most fast-growing occupations; about 30 percent of the selected fast-growing occupations require bachelor's or higher degrees. Thus the jobs of the future will be requiring a minimum of some postsecondary education and

training. Most high-demand jobs do not require postsecondary training. However, graduation from high school is increasingly becoming a requirement as is evident in many ads for such jobs.

Table A.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	•	•	•
Active Learning	36%	69%	84%
Active Listening	83%	86%	80%
Critical Thinking	61%	77%	94%
Learning Strategies	33%	31%	12%
Mathematics	31%	14%	38%
Monitoring	42%	26%	30%
Reading Comprehension	78%	94%	90%
Science	0%	9%	44%
Speaking	67%	77%	68%
Writing	36%	57%	40%
Complex Problem Solving Skills			
Complex Problem Solving	3%	17%	44%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	3%	0%	2%
Management of Personnel Resources	8%	0%	8%
Time Management	50%	60%	38%
Social Skills			
Coordination	31%	43%	32%
Instructing	31%	54%	16%
Negotiation	6%	0%	12%
Persuasion	6%	3%	14%
Service Orientation	36%	43%	10%
Social Perceptiveness	47%	51%	10%
Systems Skills			
Judgment and Decision Making	22%	20%	76%
Systems Analysis	0%	6%	10%
Systems Evaluation	3%	0%	24%
Technical Skills			
Equipment Maintenance	11%	11%	0%
Equipment Selection	17%	20%	10%
Installation	14%	11%	0%
Operation and Control	8%	3%	8%
Operation Monitoring	6%	3%	6%
Operations Analysis	3%	9%	16%
Programming	0%	6%	6%
Quality Control Analysis	3%	6%	2%
Repairing	14%	6%	0%
Technology Design	0%	9%	12%
Troubleshooting	11%	23%	14%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

Table A.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		1	16
Doctoral Degree			3
Master's Degree		1	2
Work Experience Plus a Bachelor's or Higher Degree	1	1	12
Bachelor's Degree	3	7	15
Associate Degree	1	6	
Postsecondary Vocational Training	2	5	
Work Experience in a Related Occupation	2	1	1
Long-term On-the-job Training	2	1	1
Moderate On-the-job Training	8	6	
Short-term On-the-job Training	17	6	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—presents a challenge for workforce development. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.<sup>3</sup>

High-earning occupations make up a small component of total employment and jobs offered by top employers in the state. Diversifying the state's economy would strengthen it. This means that economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Such a focus would require that workforce development pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the state. Raising personal income by improving educational attainment and technological skills for a state that has low population and labor force growth rates is an effective economic development strategy. Workforce retraining is another strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified state economy. Indeed, one cannot achieve success without the other.

CBER, UA

<sup>&</sup>lt;sup>3</sup> At the time of this writing, the state's LMI was preparing a "skills projections" report to complement its occupational projections, which would be made available on its website at http://www2.dir.state.al.us/

# **WIAA Region 1 Workforce Report**





# **Summary**

- Region 1 had a 4.7 percent unemployment rate in August 2005, with 4,900 unemployed. However, the five-county region has a 24,200-strong available labor pool that is looking for better jobs and includes 19,300 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 43 percent are prepared for 20 or more minutes longer and 59 percent will go 20 or more extra miles.
- In 2000, 12,300 residents commuted out of the region for work, compared to 8,700 incommuters. Most commuters worked in other North Alabama counties as well as in Mississippi and Tennessee. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is low compared to the state as a whole. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 70 percent and 14 percent, respectively, for the region.

- Employment is currently growing faster than the labor force and population. While this may reduce commuter outflow, it also presents a challenge to workforce development. Initiatives that address this challenge might consider (i) focusing on hard-to-serve populations (e.g. out-ofschool youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents, especially since increasing the number of residents is generally more beneficial to communities than in-commuting. However, communities must be prepared to invest in amenities and infrastructure to support population growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work. They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing, retail trade, health care and social assistance, educational services, and accommodation and food services. These five industries provided 51,120 jobs, about two-thirds of the region total in the second quarter of 2004. Three of these leading employers—manufacturing, health care and social assistance, and educational services—had higher average monthly wages than the \$2,231 regional average.
- On average about 4,100 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged just 17. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- One occupation, Carpenters, is both high-demand and fast-growing. The top five high-demand occupations are Cashiers; Food Preparation and Serving Workers; Retail Salespersons; Waiters and Waitresses; and Carpenters. The top five fast-growing occupations are Medical Assistants; Manufactured Building and Mobile Home Installers; Fitness Trainers and Aerobics Instructors; Home Health Aides; and Directors, Religious Activities and Education.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The top four are all health occupations (e.g. Anesthesiologists and family and general practitioners). Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 34 selected highdemand, 12 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Sales Managers is the only fast-growing and high-earning occupation.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and highgrowth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates

State of the Alabama Workforce I

should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.

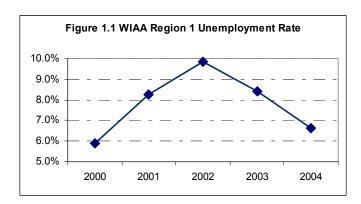
- Skill and education requirements for jobs keep rising. These facts strongly emphasize the need to raise educational attainment in the region and present challenges to workforce development. They also present opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has low population and labor force growth rates is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

### Workforce Supply

#### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 1.1 shows labor force information for Region 1 and its five counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size in 2005 for the region and four counties lowered unemployment rates. Winston County's unemployment rate fell as well because its labor force shrank by much more than the decline in number employed.

Unemployment rates in 2004 ranged between 6.3 percent and 7.3 percent for the counties, with 6.6 percent for the region. The unemployment range in August 2005 was 4.4 percent to 4.9 percent, with a 4.7 percent rate for the region. All the region's counties had higher unemployment rates than the state's 4.2 percent. Annual unemployment rates for 2000 to 2004 are shown in Figure 1.1. The region's unemployment rose from 5.9 percent in 2000 when the labor market nationwide was tight to 9.8 percent in 2002 with the economic recession. The rate has been declining with employment gains since 2003.



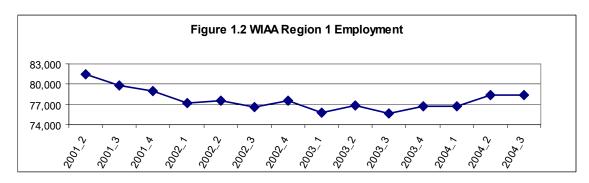
Source: Alabama Department of Industrial Relations.

Table 1.1 WIAA Region 1 Labor Force Information

		2004			
	Labor Force	Employed	Unemployed	Rate	
Colbert	24,967	23,236	1,731	6.93%	
Franklin	13,495	12,557	938	6.95%	
Lauderdale	41,651	39,041	2,610	6.27%	
Marion	13,499	12,650	849	6.29%	
Winston	10,358	9,606	752	7.26%	
WIAA Region 1	103,970	97,090	6,880	6.62%	
Alabama	2,148,766	2,029,314	119,452	5.56%	
U.S.	147,401,000	139,252,000	8,149,000	5.53%	
	2005 August				
	Labor Force	Employed	Unemployed	Rate	
Colbert	25,097	23,898	1,199	4.78%	
Franklin	13,664	12,996	668	4.89%	
Lauderdale	42,101	40,153	1,948	4.63%	
Marion	13,617	13,014	603	4.43%	
Winston	10,036	9,550	486	4.84%	
WIAA Region 1	104,515	99,611	4,904	4.69%	
Alabama	2,155,745	2,065,528	90,217	4.18%	
U.S.	150,469,000	143,142,000	7,327,000	4.87%	

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.

Employment in the region averaged 77,680 quarterly from the second quarter of 2001 to third quarter 2004 (Figure 1.2). The low point was recorded in the third quarter of 2003 but employment is clearly recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

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#### **Commuting Patterns**

In 2000, more people commuted out of the region for work than those who commuted in (Table 1.2). Commuter outflow exceeded inflow by about 3,600. There was significant commuting inside the region as well.

Table 1.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 63 percent of workers; between 20 and 40 minutes for 23 percent; and more than 40 minutes for 10 percent. Nearly 4 percent of workers take more than an hour.

The commute is less than 10 miles for 54 percent of workers and 25 percent travel 10 to 25 miles. About 17 percent of workers travel more than 25 miles one-way, with roughly 6 percent exceeding 45 miles. This commuting data suggest that roads

**Table 1.2 WIAA Region 1 Commuting Patterns** 

Area	Inflow, 2000			Outflow, 2000		
	Number	Number Percent		Number	Percent	
Colbert	1,490	17.1		2,365	19.2	
Franklin	1,059	12.2		1,357	11.0	
Lauderdale	2,074	23.8		4,767	38.8	
Marion	2,230	25.6		1,618	13.2	
Winston	1,860	21.4		2,193	17.8	
WIAA Region 1	8,713	100.0		12,300	100.0	

Average commute time (one-way), 2004						
	Percent of workers					
Less than 20 minutes	62.5					
20 to 40 minutes	23.0					
40 minutes to an hour	6.5					
More than an hour	3.6					
Average commute distance (	one-way), 2004					
	Percent of workers					
Less than 10 miles	53.7					
10 to 25 miles	25.2					
25 to 45 miles	10.7					
More than 45 miles	5.8					

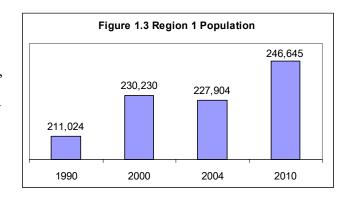
Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

#### **Population**

The Region 1 population estimate of about 227,900 for 2004 is 1.0 percent less than was recorded for 2000 (Figure 1.3 and Table 1.3). Population fell for all five counties. However, the region's population is projected to grow 7.1 percent in this decade to about 246,600 by 2010. Population growth will be fastest in Winston and Franklin counties and slowest in Colbert. If employment growth continues its fast pace, it could reduce and perhaps reverse the net out-commuting mentioned in the



previous section. Communities that experience rapid job gains may need to consider investments in amenities and infrastructure to attract new residents.

Table 1.3 WIAA Region 1 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Colbert	51,666	54,984	54,824	-0.3	57,311	4.2
Franklin	27,814	31,223	30,823	-1.3	34,513	10.5
Lauderdale	79,661	87,966	87,515	-0.5	94,983	8.0
Marion	29,830	31,214	30,267	-3.0	32,283	3.4
Winston	22,053	24,843	24,475	-1.5	27,555	10.9
WIAA Region 1	211,024	230,230	227,904	-1.0	246,645	7.1
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 1 residents who are 25 years old and over is shown below in Table 1.4 and Figures 1.4 and 1.5. About 70 percent graduated from high school and nearly 14 percent hold a bachelor's or higher degree. Lauderdale and Colbert counties have higher educational attainment than the other three. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

#### Per Capita Income

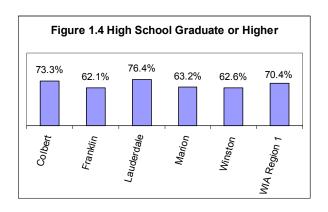
Per capita income (PCI) in Region 1 was at \$22,828 in 2003 (Figure 1.6), up by about 31 percent from 1994. Lauderdale County had the highest PCI with \$24,323, about \$2,100 below the state average. Marion County had the lowest PCI with \$19,937.

#### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment



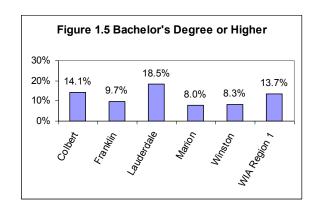
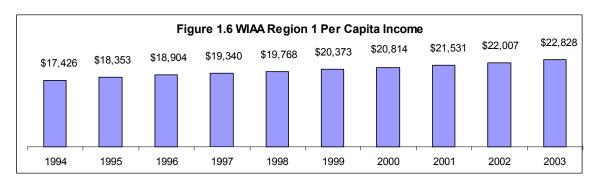


Table 1.4 Educational Attainment in 2000, Population 25 Years and Over

	Colbert	Franklin	Lauderdale	Marion	Winston	WIAA Region 1
Total	37,384	20,860	58,894	21,611	17,078	155,827
No schooling completed	418	482	420	304	343	1,967
Nursery to 4th grade	225	388	296	270	283	1,462
5th and 6th grade	812	793	1,158	835	784	4,382
7th and 8th grade	1,701	1,493	3,184	1,856	1,290	9,524
9th grade	1,691	1,607	2,294	1,182	1,099	7,873
10th grade	2,014	1,342	2,577	1,390	1,270	8,593
11th grade	1,614	980	2,066	1,225	729	6,614
12th grade, no diploma	1,497	819	1,920	900	589	5,725
High school graduate/equivalent	12,665	6,363	20,105	7,107	5,855	52,095
Some college, less than 1yr	2,326	1,366	3,681	1,454	1,077	9,904
Some college, 1+ yrs, no degree	5,289	2,270	7,784	2,315	1,797	19,455
Associate degree	1,859	936	2,528	1,054	551	6,928
Bachelor's degree	3,298	1,237	7,018	1,057	746	13,356
Master's degree	1,399	573	2,689	447	416	5,524
Professional school degree	370	168	691	189	198	1,616
Doctorate degree	206	43	483	26	51	809

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 1 had an underemployment rate of 19 percent in 2004. Applying this rate to August 2005 labor force data means that about 19,300 employed residents were underemployed (Table 1.5). Adding the unemployed gives a total available labor pool of about 24,200 for the region. This pool is about five times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better benefits or terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 12.9 percent for Colbert County to 28.1 percent for Marion. Lauderdale County has the largest available labor and Winston has the smallest.

Table 1.5 Available Labor in WIAA Region 1

	Region 1	<u>Colbert</u>	<u>Franklin</u>	<u>Lauderdale</u>	Marion	Winston
Labor Force	104,515	25,097	13,664	42,101	13,617	10,036
Employed	99,611	23,898	12,996	40,153	13,014	9,550
Underemployment rate	19.4%	12.9%	19.1%	19.0%	28.1%	18.5%
Underemployed workers	19,325	3,083	2,482	7,629	3,657	1,767
Unemployed	4,904	1,199	668	1,948	603	486
Available labor pool	24,229	4,282	3,150	9,577	4,260	2,253

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

## **Industry Mix**

The manufacturing sector was the leading employer with about 19,100 jobs in the second quarter of 2004 (Table 1.6). Rounding up the top five industries by employment are retail trade, health care and social assistance, educational services, and accommodation and food services. These five industries provided 51,120 jobs, about two-thirds of the region total. The average monthly wage across all industries in the region was just about \$2,230; three of the leading employers paid more than this average. The highest average monthly wages were for utilities (\$3,434) and wholesale trade

(\$3,131). Accommodation and food services paid the least at \$961. Wholesale trade had the highest average monthly new hire wages with \$2,561, followed by construction with \$2,142. Accommodation and food services paid the least again with \$686.

By broad industry classification, service producing industries provided 65 percent of jobs in second quarter 2004 (Figure 1.7). Goods producing industries were next with about 30 percent and public administration 5 percent. This distribution is for all jobs in the region.

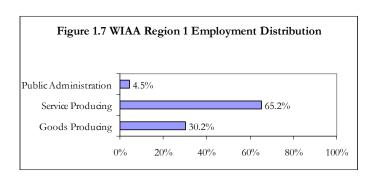


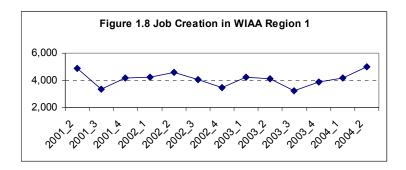
Table 1.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

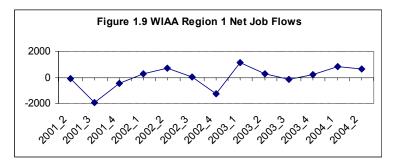
	Total			Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	494	0.64%	18	\$2,320	\$1,919
21 Mining	204	0.27%	19	\$2,857	\$2,061
22 Utilities	863	1.12%	14	\$3,434	\$1,658
23 Construction	3,463	4.51%	8	\$2,656	\$2,142
31-33 Manufacturing	19,072	24.82%	1	\$2,498	\$1,841
42 Wholesale Trade	3,702	4.82%	6	\$3,131	\$2,561
44-45 Retail Trade	10,349	13.47%	2	\$1,770	\$1,122
48-49 Transportation and Warehousing	1,430	1.86%	13	\$2,509	\$1,824
51 Information	841	1.09%	15	\$2,373	\$1,592
52 Finance and Insurance	2,378	3.09%	11	\$2,787	\$1,897
53 Real Estate and Rental and Leasing	788	1.03%	16	\$1,965	\$1,265
54 Professional, Scientific, and Technical Services	2,416	3.14%	10	\$2,306	\$1,698
55 Management of Companies and Enterprises	201	0.26%	20	\$2,524	\$2,056
56 Administrative and Support and Waste					
Management and Remediation Services	2,989	3.89%	9	\$2,041	\$2,010
61 Educational Services	6,389	8.31%	4	\$2,279	\$837
62 Health Care and Social Assistance	9,571	12.45%	3	\$2,324	\$1,733
71 Arts, Entertainment, and Recreation	520	0.68%	17	\$1,251	\$815
72 Accommodation and Food Services	5,739	7.47%	5	\$961	\$686
81 Other Services (except Public Administration)	1,959	2.55%	12	\$1,708	\$1,286
92 Public Administration	3,480	4.53%	7	\$2,235	\$1,331
ALL INDUSTRIES	76,848	100%		\$2,231	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### Job Creation and Net Job Flows

On average, about 4,100 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure 1.8 shows job creation on a downward trend over the period, but clearly rising since the third quarter of 2003. Quarterly net job flows averaged 17 in the same period and explains the job creation trend (Figure 1.9). Net job flows have ranged from a loss of about 1,900 to a gain of almost 1,200. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **High-Demand Occupations**

Table 1.7 shows the top 34 of more than 430 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; retail trade; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Food Preparation and Serving Workers; Retail Salespersons; Waiters and Waitresses; and Carpenters.

Table 1.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annu	al Average Jo	b Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	190	20	170
Combined Food Preparation and Serving Workers	125	30	95
Retail Salespersons	115	20	95
Waiters and Waitresses	100	10	90
Carpenters**	85	50	35
Team Assemblers	75	5	70
Registered Nurses	65	25	40
Office Clerks, General	65	15	50
General and Operations Managers	60	20	40
Truck Drivers, Heavy and Tractor-Trailer	55	25	30
Meat, Poultry, and Fish Cutters and Trimmers	***	***	***
Janitors and Cleaners, Except Maids	45	15	30
First-Line Supervisors/Managers, Retail Sales	45	15	30
Teacher Assistants	45	15	30
Sales Representatives, Except Technical and Scientific Products	40	15	25
Child Care Workers	40	10	30
Bookkeeping, Accounting, and Auditing Clerks	40	5	35
Elementary School Teachers, Except Special Education	40	15	25
Nursing Aides, Orderlies, and Attendants	40	20	20
Maintenance and Repair Workers, General	35	15	20
First-Line Supervisors/Managers of Production and Operating Workers	35	15	20
Licensed Practical and Licensed Vocational Nurses	35	10	25
Maids and Housekeeping Cleaners	35	15	20
Cabinetmakers and Bench Carpenters	30	10	20
Welders, Cutters, Solderers, and Brazers	30	10	20
Tellers	30	5	25
Secondary School Teachers, Except Special Education	30	10	20
Automotive Service Tech. and Mechanics	30	10	20
Receptionists and Information Clerks	25	10	15
First-Line Supervisors/Managers of Office and Administrative Support Workers	25	5	20
Cooks, Institution and Cafeteria	25	5	20
Customer Service Representatives	25	10	15
Hairdressers, Hairstylists, and Cosmetologists	25	5	20
Electricians	25	10	15

Note: A minimum of 25 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

## **Fast-Growing Occupations**

The top 12 of occupations ranked by projected growth of employment are listed in Table 1.8. A third of these occupations are in health or health support. The top five fast-growing occupations are Medical Assistants; Manufactured Building and Mobile Home Installers; Fitness Trainers and Aerobics Instructors; Home Health Aides; and Directors, Religious Activities and Education. Only one occupation, Carpenters, is both high-demand and fast-growing.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 1.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Emplo	yment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Medical Assistants	140	190	35.7	3.10	10
Manufactured Building and Mobile Home Installers	130	170	30.8	2.72	10
Fitness Trainers and Aerobics Instructors	110	140	27.3	2.44	10
Home Health Aides	420	530	26.2	2.35	15
Directors, Religious Activities and Education	240	300	25.0	2.26	10
Dental Assistants	160	200	25.0	2.26	10
Sales Managers	210	260	23.8	2.16	10
Pharmacy Technicians	270	330	22.2	2.03	10
Carpenters**	2,160	2,640	22.2	2.03	85
Merchandise Displayers and Window Trimmers	250	300	20.0	1.84	10
Computer-Controlled Machine Tool Operators, Metal and Plastic	150	180	20.0	1.84	10
Sheet Metal Workers	200	240	20.0	1.84	10

Note: Selection criterion is an annual growth rate of at least 1.80 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

#### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 1.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The top four are health occupations. The selected high-earning occupations are generally not fast-growing or high-demand. Only one high-earning occupation, General and Operations Managers, is in the high-demand category. Sales Managers is the only high-earning and fast-growing occupation.

#### Other Workforce Issues

#### Available Labor

Employment is a critical input to economic development. As such, the availability of labor is very important. WIAA Region 1 currently has a low unemployment rate, but it also has a 24,200-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of 19,300 underemployed and 4,900 unemployed. The region's underemployed workers are willing to commute farther and longer; 43 percent are prepared for 20 or more minutes longer and 59 percent will go 20 or more extra miles.

A lack of job opportunities in their areas, low wages at available jobs, and living too far from jobs are the primary reasons given for being underemployed. Nonworkers cite retirement and disability as primary reasons for being unemployed. A few also cite lack of job opportunities in their areas as a major reason for not working. Such workers may become part of the labor force if that problem can be addressed. Economic development efforts should take these factors into consideration.

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<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

Table 1.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Anesthesiologists	196,976
Internists, General	169,749
Family and General Practitioners	146,370
Podiatrists	142,667
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
General and Operations Managers	85,821
Aerospace Engineers	84,344
Pharmacists	83,075
Chiropractors	82,514
Computer and Information Systems Managers	81,078
Marketing Managers	79,435
Sales Managers	78,957
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Chemical Engineers	76,502
Financial Managers	76,003
Medical and Health Services Managers	72,925
Electrical Engineers	72,923
Purchasing Managers	72,488
Computer Software Engineers, Applications	
Mechanical Engineers	71,698 70,221
	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers Management Analysts	69,056
0 ;	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Physics Teachers, Postsecondary	65,710
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Economics Teachers, Postsecondary	64,560
Education Administrators, Elementary and Secondary School	64,480
Architects, Except Landscape and Naval	63,627
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
First-Line Supervisors/Managers of Non-Retail Sales Workers	63,149
Physical Therapists	61,714
Transportation, Storage, and Distribution Managers	61,630
Public Relations Managers	60,944
Administrative Services Managers	59,218
Judges, Magistrate Judges, and Magistrates	58,802
Biological Science Teachers, Postsecondary	58,090
Property, Real Estate, and Community Association Managers	57,720

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

Employment seems to be growing faster than the labor force. Higher employment demand could be alleviated somewhat with in-commuting, but rising employment demand outside the region could increase out-commuting. Availability of jobs in the region will present communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is low relative to the state's rate and this is expected to continue through 2010. The low population growth rate may hinder the ability to meet increases in demand for workers. Another strategy to expand the labor force to meet this demand is to focus on hard-to-serve populations. Hard-to-serve populations include persons in poverty, those receiving welfare, those in sparsely populated areas, and those on active parole. These populations are often outside of the mainstream economy and poor (e.g. out-of-school youth). They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. They are a potential human resource and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 1.10 shows the percentage of selected occupations in WIAA Region 1 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 1.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Several basic skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills. These skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Combined Food Preparation and Serving Workers; Retail Salespersons; Waiters and Waitresses; and Medical Assistants. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

Table 1.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills			
Active Learning	35%	42%	66%
Active Listening	74%	75%	84%
Critical Thinking	62%	33%	90%
Learning Strategies	32%	17%	16%
Mathematics	32%	33%	28%
Monitoring	32%	25%	34%
Reading Comprehension	71%	67%	92%
Science	0%	0%	26%
Speaking	62%	67%	70%
Writing	32%	42%	50%
Complex Problem Solving Skills			
Complex Problem Solving	3%	8%	38%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	6%	0%	6%
Management of Personnel Resources	12%	0%	16%
Time Management	47%	42%	54%
Social Skills			
Coordination	29%	42%	30%
Instructing	32%	58%	26%
Negotiation	6%	0%	14%
Persuasion	6%	8%	16%
Service Orientation	38%	50%	14%
Social Perceptiveness	44%	50%	20%
Systems Skills			
Judgment and Decision Making	21%	17%	60%
Systems Analysis	0%	0%	10%
Systems Evaluation	0%	0%	18%
Technical Skills	120/	250/	007
Equipment Maintenance	12%	25%	0%
Equipment Selection	18%	58%	4%
Installation	15%	33%	0%
Operation and Control	9%	25%	2%
Operation Monitoring	6%	8%	2%
Operations Analysis	3%	17%	18%
Programming	0%	0%	4%
Quality Control Analysis	3%	25%	4%
Repairing	15%	17%	0%
Technology Design	0%	0%	10%
Troubleshooting	12%	8%	10%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

#### **Education and Training Issues**

Educational attainment in WIAA Region 1 is low compared to the state as a whole. Seventy percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, almost 14 percent have bachelor's or higher degree; 19 percent of Alabamians do. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the region.

Table 1.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training. Moderate on-the-job training is the minimum requirement for most fast-growing occupations. Short-term to moderate on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require high school graduation and some postsecondary education and training.

Table 1.11 Number of Selected Occupations with Most Common Education/Training Requirement

Most Common Education/Training Requirements Categories	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
First Professional Degree	Оссираноно	o coupations	9
Doctoral Degree			4
Master's Degree			2
Work Experience Plus a Bachelor's or Higher Degree	1	1	15
Bachelor's Degree	2	1	17
Associate Degree	1		
Postsecondary Vocational Training	3	1	
Work Experience in a Related Occupation	3		2
Long-term On-the-job Training	4	1	
Moderate On-the-job Training	7	7	1
Short-term On-the-job Training	13	1	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 1.10) presents a challenge for workforce development in the region. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic

development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills for a region that has low population and labor force growth rates is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the June 2005 Annual Report of the Region 1 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

Throughout the region an emphasis should be placed on instilling the "soft skills" (workplace ethics, problem-solving, team-building, communications) that apply to essentially all current and future industries. The state's 10-week Focused Industry Training basic workplace skills training should be funded in the five counties and made widely available as a means of upgrading the productivity of the region's workforce, and to support new and expanding industries. Much greater participation is needed in the Industry-Education Alliances and funding must be made available for alliance initiatives. The region's two-year colleges are committed to meeting the region's workforce training needs, and need increased and more stable support for vocational, technical, and occupational training. The *Displaced Worker Economic Development Strategy* (November 2003) prepared by NACOLG should be implemented as funds become available. Page 26 in that report identifies 12 high priority action items. There is also an opportunity and need to integrate the NACOLG Senior Aides Program into the region's workforce development activities.

In the northern part of the region (Colbert, Lauderdale, and to some extent, Franklin counties), training needs are apparent in the leisure, hospitality, entertainment, and tourism industries as a result of the area's recent initiative to become a tourist destination. This part of the region is also the health care and retail/wholesale trade center for a three-state region. Support for health care (especially registered nursing) faculty is critically needed to expand the registered nursing and related patient care education programs at regional colleges and university.

In the southern part of the region, the drop-out problem calls for special attention to youths, young adults, and older adults with literacy problems. Without corrective action, these rural areas are severely handicapped in the new knowledge-based economy.

Action issue 2. How can/should worker skills be generally upgraded in the region?

Systems are in place through the career centers and higher education-based training programs to address most of these worker skills issues. Possibly a five-county consortium could be established

comprised of key employers, HR directors, and training providers to highlight business/industry training needs, explain and promote available training programs, and present a united front in regard to soliciting funding for new and continued training. It would have to be endorsed by the state WFD planning system in order to be effective. After a variety of federal/state workforce initiatives dating back to the 1960s that produced mixed results, there is a great deal of cynicism by private businesses and industries about these efforts. Participation in the WFD planning process by the private sector is often difficult to obtain. Opportunities abound to extend training and education opportunities to geographically disadvantaged students, adults, and the workforce through the extensive systems of distance learning in place at the University of North Alabama, Bevill State Community College, and Northwest-Shoals Community College.

Action issue 3. How can future workers be helped to make better choices about career preparation?

As mentioned earlier, a strong, effective counseling system in the school systems is critically important. An expansion of job shadowing and the Choices programming offered through some chambers of commerce would achieve positive results. The media can play a supportive role by highlighting careers in growing fields and explaining entry requirements.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Yes.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

<u>Employers</u>—Employers should clearly define and regularly communicate their current and projected workforce training needs to the appropriate training providers, and provide candid feedback on training effectiveness. Employers should be encouraged to adopt systems such as WorkKeys. Employer participation in the Industry-Education Alliances is essential for those alliances to function.

<u>Partner agencies</u>—These agencies should share information with each other about workforce training plans and initiatives, and collaborate when it is to the benefit of clients, paying special attention to both urban and rural sectors of the region.

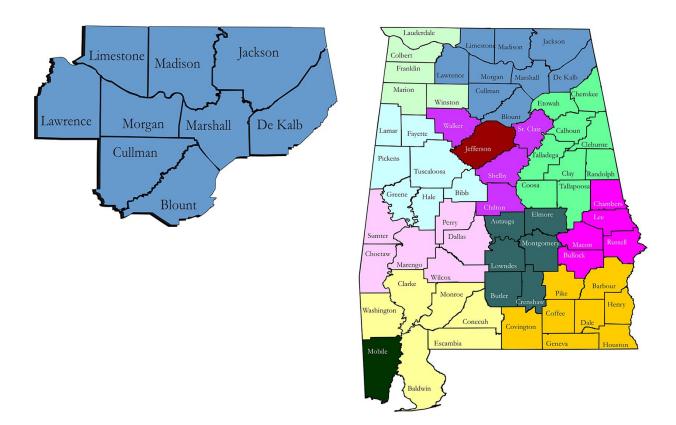
<u>Elected officials</u>—They should become familiar with workforce development issues and offer to bring employers and training providers together when it appears the workforce development system is not functioning well. They should also take more responsibility for developing strategies to increase financial resources for WFD.

<u>Faith- and community-based organizations</u>—When these organizations have unique and valuable training capabilities, they should have an opportunity to provide training. They can engage in community assessment of WFD needs and collaborate with education agencies in developing and implementing programs to decrease drop-out rates, increase literacy rates, and provide soft skill training.

News media—As a public service, the media can help highlight career opportunities and the education and training requirements for career entry and long-term success. They can develop PSAs



# **WIAA Region 2 Workforce Report**



# **Summary**

- Region 2 had a low 3.8 percent unemployment rate in August 2005, with 16,260 unemployed. However, the nine-county region has a large 106,700-strong available labor pool that is looking for better jobs and includes 90,470 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 39 percent are prepared for 20 or more minutes longer and also for 20 or more extra miles.
- In 2000, 33,240 residents commuted out of the region for work, compared to 31,310 incommuters. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is slightly better than for the state as a whole mainly because of Madison County's high level. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 76 percent and 20 percent, respectively, for the region.
- Employment is currently growing faster than the labor force and population. This can intensify in-commuting and presents a challenge to workforce development. Initiatives that address this

challenge might consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents, especially since increasing the number of residents is generally more beneficial to communities than in-commuting. However, communities must be prepared to invest in amenities and infrastructure to support population growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work. They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.

- By sector, the top five employers in the region are manufacturing, retail trade; health care and social assistance; professional, scientific, and technical services; and accommodation and food services. These five industries provided 211,670 jobs, 63 percent of the region total in the second quarter of 2004. Two of these leading employers—manufacturing and professional, scientific, and technical services—had higher average monthly wages than the \$2,785 regional average.
- On average about 18,000 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 1,426. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Six occupations are both high-demand and fast-growing: Computer Software Engineers, Applications; Security Guards; Receptionists and Information Clerks; Packers and Packagers, Hand; Nursing Aides, Orderlies, and Attendants; and Registered Nurses. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses. The top five fast-growing occupations are Medical Assistants; Medical Records and Health Information Technicians; Home Health Aides; Personal and Home Care Aides; and Network Systems and Data Communications Analysts.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. The top four are all health occupations (e.g. Internists, General). Almost all high-earning occupations require bachelor's or higher degrees. Computer Software Engineers, Applications is the one occupation that is in high-demand, fast-growing, and high-earning.
- Fast-growing or high-demand occupations are generally not high-earning. Of 40 selected high-demand, 42 selected fast-growing, and 50 selected high-earning occupations—Computer Software Engineers, Applications—is the only one in high-demand, fast-growing, and high-earning. General and Operations Managers is both high-earning and in high-demand. Sales Managers, Pharmacists, and Internists, General are the fast-growing and high-earning occupations.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic

development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

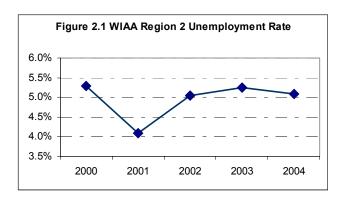
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. These facts strongly emphasize the need to raise educational attainment in the region and present challenges to workforce development. They also present opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment is an effective economic development strategy for the region. It will complement the region's higher than Alabama population growth rate, since employment is growing faster than the labor force.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

# Workforce Supply

## **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 2.1 shows labor force information for Region 2 and its nine counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size lowered unemployment rates in 2005. The labor force shrank in four counties—Cullman, DeKalb, Jackson, and Morgan.

Unemployment rates in 2004 ranged between 4.0 percent and 6.7 percent for the counties, with 5.1 percent for the region. The unemployment range in August 2005 was 3.2 percent to 5.2 percent, with a 3.8 percent rate for the region. Five counties had higher unemployment rates than the state's 4.2 percent. Annual unemployment rates for 2000 to 2004 are shown in Figure 2.1. The region's unemployment dropped to 4.1 percent in 2001, rose to 5.3 percent in



Source: Alabama Department of Industrial Relations.

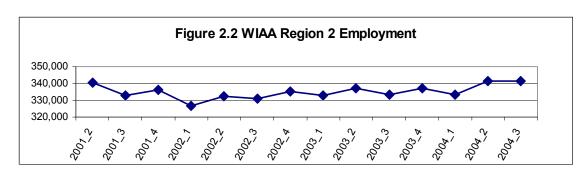
2003, but has been falling since with improvements in employment.

Employment in the region averaged 335,100 quarterly from the second quarter of 2001 to third quarter 2004 (Figure 2.2). The low point was recorded in the first quarter of 2002 but employment is clearly recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.

Table 2.1 WIAA Region 2 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Blount	26,179	25,127	1,052	4.02%
Cullman	38,666	36,703	1,963	5.08%
DeKalb	32,257	30,438	1,819	5.64%
Jackson	27,264	25,425	1,839	6.75%
Lawrence	16,121	15,092	1,029	6.38%
Limestone	34,733	32,990	1,743	5.02%
Madison	158,016	150,930	7,086	4.48%
Marshall	41,587	39,594	1,993	4.79%
Morgan	56,085	52,694	3,391	6.05%
WIAA Region 2	430,908	408,993	21,915	5.09%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Blount	26,205	25,362	843	3.22%
Cullman	38,143	36,740	1,403	3.68%
DeKalb	31,880	30,465	1,415	4.44%
Jackson	27,048	25,793	1,255	4.64%
Lawrence	16,203	15,357	846	5.22%
Limestone	35,471	33,940	1,531	4.32%
Madison	160,371	155,279	5,092	3.18%
Marshall	41,905	40,387	1,518	3.62%
Morgan	55,976	53,618	2,358	4.21%
WIAA Region 2	433,202	416,941	16,261	3.75%
Alabama	2,155,745	2,065,528	90,217	4.18%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **Commuting Patterns**

In 2000, 1,930 more people commuted into the region for work than commuted out (Table 2.2). There was significant commuting within the region as well.

Table 2.2 also shows the one-way average commute time and distance for workers in 2004; the data was collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 59 percent of resident workers; between 20 and 40 minutes for 28 percent; and more than 40 minutes for 10 percent. About 1 percent of workers take more than an hour.

The commute is less than 10 miles for 46 percent of workers and roughly 32 percent travel 10 to 25 miles. About 18 percent of workers travel more than 25 miles one-way, with nearly 5 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

**Table 2.2 WIAA Region 2 Commuting Patterns** 

Area	Inflow, 2000			Outflow	, 2000
	Number	Percent		Number	Percent
Blount	9,826	29.6		11,123	35.5
Cullman	1,782	5.4		4,415	14.1
DeKalb	2,376	7.2		3,089	9.9
Jackson	1,346	4.1		3,768	12.0
Lawrence	1,449	4.4		1,244	4.0
Limestone	2,375	7.2		1,536	4.9
Madison	6,977	21.0		2,926	9.4
Marshall	4,771	14.4		2,100	6.7
Morgan	2,338	7.0		1,109	3.5
WIAA Region 2	33,240	100.0		31,310	100.0

# Average commute time (one-way), 2004 Percent of workers

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Less than 20 minutes	59.0
20 to 40 minutes	28.0
40 minutes to an hour	8.6
More than an hour	1.3

#### Average commute distance (one-way), 2004

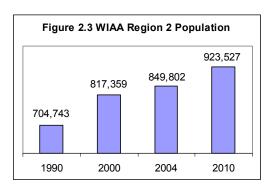
_	Percent of workers
Less than 10 miles	46.2
10 to 25 miles	31.6
25 to 45 miles	13.1
More than 45 miles	4.7

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

#### **Population**

The Region 2 population estimate of about 849,800 for 2004 is 4.0 percent more than was recorded for 2000 (Figure 2.3 and Table 2.3). DeKalb County led population growth with 7.8 percent, but Blount and Limestone counties lost some residents. The region's population is projected to grow 13 percent in this decade to about 923,500 by 2010. Population growth will be fastest in DeKalb County and slowest in Limestone. If employment growth continues its fast pace, it could intensify the net in-commuting. Communities that



experience rapid job gains may need to consider investments in amenities and infrastructure to attract new residents.

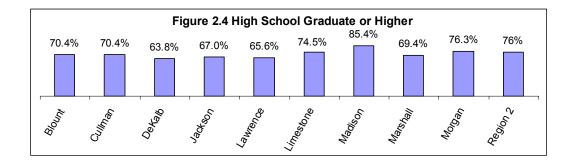
Table 2.3 WIAA Region 2 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Blount	47,796	53,926	53,821	-0.2	59,104	9.6
Cullman	54,651	64,452	66,935	3.9	75,408	17.0
DeKalb	39,248	51,024	54,988	7.8	63,715	24.9
Jackson	70,832	82,231	84,781	3.1	94,319	14.7
Lawrence	67,613	77,483	79,189	2.2	86,982	12.3
Limestone	31,513	34,803	34,418	-1.1	37,378	7.4
Madison	54,135	65,676	69,387	5.7	76,638	16.7
Marshall	238,912	276,700	293,072	5.9	309,616	11.9
Morgan	100,043	111,064	113,211	1.9	120,367	8.4
WIAA Region 2	704,743	817,359	849,802	4.0	923,527	13.0
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 2 residents who are 25 years old and over is shown below in Table 2.4 and Figures 2.4 and 2.5. Seventy-six percent graduated from high school and about 20 percent hold a bachelor's or higher degree. Madison County stands out with 85 percent high school graduates and 34 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



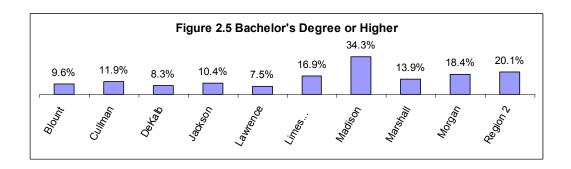


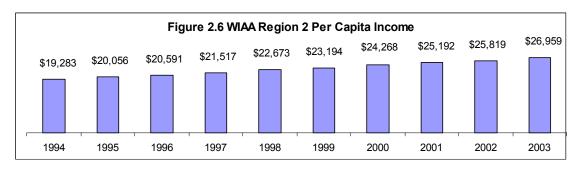
Table 2.4 Educational Attainment in 2000, Population 25 Years and Over

	Blount	Cullman	DeKalb	Jackson	Lawrence	Limestone	Madison	Marshall	Morgan	Region 2
Total	33,702	51,787	42,740	36,435	22,894	43,456	180,389	54,961	73,331	539,695
No schooling completed	526	452	826	521	281	357	1,152	691	875	5,681
Nursery to 4th grade	308	403	610	456	220	408	801	607	545	4,358
5th and 6th grade	1,272	1,537	1,611	1,213	779	1,152	2,006	1,794	1,369	12,733
7th and 8th grade	1,620	3,398	3,110	2,572	1,558	2,059	4,430	3,400	3,169	25,316
9th grade	1,695	2,882	2,766	2,194	1,332	1,761	4,099	2,882	2,746	22,357
10th grade	1,986	2,724	2,928	2,082	1,623	2,091	4,989	3,127	3,335	24,885
11th grade	1,428	2,290	1,875	1,813	1,274	1,859	4,477	2,465	2,719	20,200
12th grade, no diploma	1,125	1,636	1,743	1,155	805	1,394	4,354	1,879	2,589	16,680
High school graduate/equivalent	12,136	16,584	14,549	12,707	9,029	14,102	39,591	16,758	22,252	157,708
Some college, less than 1yr	2,332	3,758	2,595	2,249	1,272	2,968	12,372	3,616	5,608	36,770
Some college, 1+ yrs, no degree	3,944	6,469	4,588	3,790	2,149	5,861	29,277	7,022	10,429	73,529
Associate degree	2,095	3,492	2,011	1,885	849	2,095	11,027	3,081	4,205	30,740
Bachelor's degree	1,972	3,845	2,095	2,400	1,159	5,166	40,961	4,997	9,287	71,882
Master's degree	893	1,660	1,059	1,023	392	1,705	15,894	1,948	3,203	27,777
Professional school degree	247	527	278	284	147	270	2,569	489	682	5,493
Doctorate degree	123	130	96	91	25	208	2,390	205	318	3,586

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

## Per Capita Income

Per capita income (PCI) in Region 2 was at \$26,959 in 2003 (Figure 2.6), up by about 40 percent from 1994, and \$454 or 2 percent higher than the Alabama average of \$26,505. Madison County had the highest PCI with \$31,797, about \$5,300 above the state average. Blount County had the lowest PCI with \$21,623.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

## Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment

because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 2 had an underemployment rate of 21.7 percent in 2004. Applying this rate to August 2005 labor force data means that about 90,476 employed residents were underemployed (Table 2.5). Adding the unemployed gives a total available labor pool of about 106,700 for the region. This pool is about 6.5 times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 17.5 percent for Jackson County to 27.3 percent for Limestone. Madison County has the largest available labor and Lawrence has the smallest.

Table 2.5 Available Labor in WIAA Region 2

	Region 2	Blount	Cullman	<u>DeKalb</u>	<u>Jackson</u>	Lawrence	Limestone	Madison	Marshall	Morgan
Labor Force	433,202	26,205	38,143	31,880	27,048	16,203	35,471	160,371	41,905	55,976
Employed	416,941	25,362	36,740	30,465	25,793	15,357	33,940	155,279	40,387	53,618
Underemployment rate	21.7%	20.3%	27.1%	18.0%	17.5%	26.6%	27.3%	27.1%	18.7%	23.8%
Underemployed workers	90,476	5,148	9,957	5,484	4,514	4,085	9,266	42,081	7,552	12,761
Unemployed	16,261	843	1,403	1,415	1,255	846	1,531	5,092	1,518	2,358
Available labor pool	106,737	5,991	11,360	6,899	5,769	4,931	10,797	47,173	9,070	15,119

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

## Workforce Demand

## **Industry Mix**

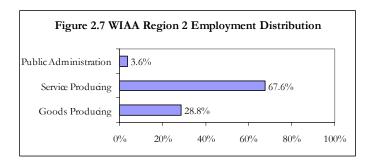
The manufacturing sector was the leading employer with about 79,700 jobs in the second quarter of 2004 (Table 2.6). Rounding up the top five industries by employment are retail trade; health care and social assistance; professional, scientific, and technical services; and accommodation and food services. These five industries provided 211,670 jobs, 63 percent of the region total. The average monthly wage across all industries in the region was \$2,785; two of the leading employers paid more than this average. The highest average monthly wages were for professional, scientific, and technical services (\$4,927) and wholesale trade (\$3,644). Accommodation and food services paid the least at \$1,127. Professional, scientific, and technical services also had the highest average monthly new hire wages with \$3,860, followed by finance and insurance with \$2,607. Accommodation and food services paid the least again with \$798.

Table 2.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

	Total	01	ъ 1	Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,792	0.53%	18	\$2,472	\$1,513
21 Mining	455	0.14%	20	\$3,399	\$2,583
22 Utilities	2,250	0.67%	17	\$3,330	\$1,980
23 Construction	14,886	4.43%	8	\$2,709	\$2,342
31-33 Manufacturing	79,726	23.70%	1	\$3,428	\$2,309
42 Wholesale Trade	12,313	3.66%	9	\$3,644	\$2,603
44-45 Retail Trade	45,405	13.50%	2	\$1,917	\$1,281
48-49 Transportation and Warehousing	9,294	2.76%	11	\$2,541	\$2,114
51 Information	4,312	1.28%	14	\$3,346	\$2,195
52 Finance and Insurance	7,775	2.31%	12	\$3,300	<b>\$2,6</b> 07
53 Real Estate and Rental and Leasing	3,849	1.14%	15	\$2,226	\$1,570
54 Professional, Scientific, and Technical Services	28,374	8.44%	4	\$4,927	\$3,860
55 Management of Companies and Enterprises	1,055	0.31%	19	\$2,860	\$1,758
56 Administrative and Support and Waste					
Management and Remediation Services	18,492	5.50%	7	\$1,991	\$1,449
61 Educational Services	25,661	7.63%	6	\$2,438	\$1,065
62 Health Care and Social Assistance	32,160	9.56%	3	\$2,652	\$1,753
71 Arts, Entertainment, and Recreation	2,993	0.89%	16	\$1,302	\$787
72 Accommodation and Food Services	26,007	7.73%	5	\$1,127	\$798
81 Other Services (except Public Administration)	7,263	2.16%	13	\$2,001	\$1,533
92 Public Administration	12,267	3.65%	10	\$2,473	\$1,415
ALL INDUSTRIES	336,329	100.00%		\$2,785	

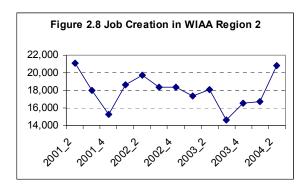
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

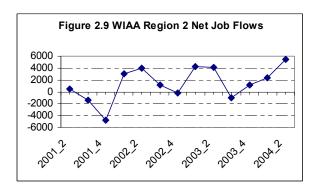
By broad industry classification, service producing industries provided about 68 percent of jobs in second quarter 2004 (Figure 2.7). Goods producing industries were next with 29 percent and public administration nearly 4 percent. This distribution is for all covered jobs in the region.



## Job Creation and Net Job Flows

On average, almost 18,000 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure 2.8 shows job creation on a slightly downward trend over the period, but clearly rising since the third quarter of 2003. Quarterly net job flows averaged 1,426 in the same period (Figure 2.9). Net job flows have ranged from a loss of about 4,800 to a gain of almost 5,500. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table 2.7 shows the top 40 of more than 560 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; retail trade; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses.

Table 2.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annu	al Average Jo	b Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	710	175	535
Retail Salespersons	660	190	470
Combined Food Preparation and Serving Workers	485	165	320
Laborers and Freight, Stock, and Material Movers, Hand	445	100	345
Waiters and Waitresses	415	100	315
Registered Nurses**	285	165	120
General and Operations Managers	280	115	165
Stock Clerks and Order Fillers	230	5	225
Truck Drivers, Heavy and Tractor-Trailer	230	135	95
Office Clerks, General	230	80	150
Packers and Packagers, Hand**	220	140	80
Janitors and Cleaners, Except Maids	195	90	105
First-Line Supervisors/Managers, Retail Sales	190	90	100
Secretaries, Except Legal, Medical, and Executive	175	30	145
Teacher Assistants	175	95	80
Sales Representatives, Except Technical and Scientific Products	165	80	85
Bookkeeping, Accounting, and Auditing Clerks	165	50	115
Maids and Housekeeping Cleaners	160	90	70
Team Assemblers	160	5	155
Farm, Ranch, and Other Agricultural Managers	145	60	85
Child Care Workers	145	60	85
Elementary School Teachers, Except Special Education	145	75	70
Nursing Aides, Orderlies, and Attendants**	140	90	50
Licensed Practical and Licensed Vocational Nurses	120	60	60
Receptionists and Information Clerks**	120	70	50
Maintenance and Repair Workers, General	120	50	70
Meat, Poultry, and Fish Cutters and Trimmers	120	50	70
Security Guards**	115	65	50
Automotive Service Technicians and Mechanics	115	50	65
First-Line Supervisors/Managers of Office and Administrative Support Workers	110	40	70
Secondary School Teachers, Except Special Education	110	50	60
Customer Service Representatives	105	60	45
Computer Systems Analysts	100	60	40
Tellers	95	25	70
Landscaping and Groundskeeping Workers	95	40	55
First-Line Supervisors/Managers of Production and Operating Workers	90	20	70
Cooks, Institution and Cafeteria	90	35	55
Electricians	85	45	40
Accountants and Auditors	80	30	50
Computer Software Engineers, Applications**	80	65	15

Note: A minimum of 80 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

## **Fast-Growing Occupations**

The top 42 of occupations ranked by projected growth of employment are listed in Table 2.8. A third of these occupations are in health or health support. The top five fast-growing occupations are Medical Assistants; Medical Records and Health Information Technicians; Home Health Aides; Personal and Home Care Aides; and Network Systems and Data Communications Analysts. Six

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

occupations are both high-demand and fast-growing: Computer Software Engineers, Applications; Security Guards; Receptionists and Information Clerks; Packers and Packagers, Hand; Nursing Aides, Orderlies, and Attendants; and Registered Nurses.

Table 2.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

					Total
	Employ	Employment		Annual Growth	Annual Average Job
Occupation	2002	2012	Percent Change	(Percent)	Openings
Medical Assistants	430	710	65.1	5.14	40
Medical Records and Health Info. Technicians	340	520	52.9	4.34	25
Home Health Aides	950	1,450	52.6	4.32	60
Personal and Home Care Aides	720	1,080	50.0	4.14	45
Network Systems and Data Communications Analysts	300	440	46.7	3.90	20
Social and Human Service Assistants	500	730	46.0	3.86	35
Dental Hygienists	400	580	45.0	3.79	20
Dental Assistants	570	820	43.9	3.70	40
Pharmacists	560	800	42.9	3.63	35
Computer Software Engineers, Applications**	1,540	2,190	42.2	3.58	80
Physical Therapist Assistants	170	240	41.2	3.51	10
Database Administrators	220	310	40.9	3.49	10
Preschool Teachers, Except Special Ed.	730	1,020	39.7	3.40	40
Fitness Trainers and Aerobics Instructors	240	330	37.5	3.24	15
Directors, Religious Activities and Education	470	640	36.2	3.14	20
Public Relations Managers	360	490	36.1	3.13	20
Computer Software Engineer, Systems Software	1,220	1,660	36.1	3.13	55
Emergency Medical Tech. and Paramedics	490	660	34.7	3.02	20
Anesthesiologists	***	***	***	***	***
Pharmacy Technicians	640	860	34.4	3.00	30
Counter and Rental Clerks	970	1,300	34.0	2.97	70
Security Guards**	1,870	2,500	33.7	2.95	115
Veterinary Assistants and Laboratory Animal Caretakers	210	280	33.3	2.92	10
Vocational Education Teachers, Postsecondary	180	240	33.3	2.92	10
Demonstrators and Product Promoters	180	240	33.3	2.92	10
Receptionists and Information Clerks**	2,110	2,810	33.2	2.91	120
Packers and Packagers, Hand**	4,320	5,730	32.6	2.86	220
Nursing Aides, Orderlies, and Attendants**	2,800	3,710	32.5	2.85	140
Computer Support Specialists	1,310	1,730	32.1	2.82	55
Internists, General	220	290	31.8	2.80	10
MFG. Building and Mobile Home Installers	***	***	***	***	***
Medical Transcriptionists	190	250	31.6	2.78	10
Choreographers	160	210	31.3	2.76	15
Network and Computer Sys. Administrators	480	630	31.3	2.76	20
Sales Engineers	130	170	30.8	2.72	10
Child, Family, and School Social Workers	300	390	30.0	2.66	15
Sales Managers	780	1,010	29.5	2.62	40
Cardiovascular Technologists and Technicians	170	220	29.4	2.61	10
Legal Secretaries	410	530	29.3	2.60	20
Production, Planning, and Expediting Clerks	1,040	1,340	28.8	2.57	55
Registered Nurses**	5,740	7,380	28.6	2.54	285
Special Education Teachers, Middle School	140	180	28.6	2.54	10

Note: Selection criteria are annual growth rate of at least 2.50 percent and a minimum of 10 average annual job openings. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

#### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 2.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. The top four are health occupations. The selected high-earning occupations are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Three occupations are both high-earning and fast-growing: Sales Managers; Pharmacists; and Internists, General. Computer Software Engineers, Applications is the one occupation that is in high-demand, fast-growing, and high-earning.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 2 currently has a low unemployment rate, but it also has a 106,700-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of 90,470 underemployed and 16,260 unemployed. The region's underemployed workers are willing to commute farther and longer; 39 percent are prepared for 20 or more minutes longer and also for 20 or more extra miles.

A lack of job opportunities in their areas and low wages at the available jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could be alleviated somewhat with in-commuting. However, the availability of jobs in the region presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is higher than the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will increase labor force participation and may be very effective given the region's low population growth rate.

Table 2.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Psychiatrists	137,197
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Administrative Law Judges, Adjudicators, and Hearing Officers	103,563
Engineering Managers	96,200
Physicists	93,974
Computer and Information Scientists, Research	90,459
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Mathematicians	83,366
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Computer Hardware Engineers	79,414
Sales Managers	78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Materials Scientists	76,128
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	74,870
Materials Engineers	73,382
Atmospheric and Space Scientists	73,008
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Operations Research Analysts	66,518
Physics Teachers, Postsecondary	65,710

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 2.10 shows the percentage of selected occupations in WIAA Region 2 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 2.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving and systems skills, which require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; Home Health Aides; and Medical Assistants. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in WIAA Region 2 is just slightly better compared to the state as a whole. Seventy-six percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, almost 20 percent have bachelor's or higher degree; 19 percent of Alabamians do. Madison County stands out with 85 percent high school graduates and 34 percent bachelor's or higher degree holders. All the other counties have lower educational attainment levels than the state except Morgan County, which has comparable levels. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the region.

Table 2.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training. Work experience in a related occupation training is the minimum requirement for most fast-growing jobs. Some form of on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training.

The finding that basic skills are important for all the selected occupations (Table 2.10) presents a challenge for workforce development in the region. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers

should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

Table 2.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	•	-	•
Active Learning	38%	62%	74%
Active Listening	73%	90%	80%
Critical Thinking	60%	71%	94%
Learning Strategies	28%	36%	14%
Mathematics	25%	17%	46%
Monitoring	40%	36%	22%
Reading Comprehension	73%	95%	92%
Science	3%	5%	40%
Speaking	63%	83%	66%
Writing	38%	55%	46%
Complex Problem Solving Skills			
Complex Problem Solving	8%	17%	44%
Resource Management Skills			
Management of Financial Resources	5%	0%	14%
Management of Material Resources	5%	2%	2%
Management of Personnel Resources	13%	0%	8%
Time Management	50%	55%	42%
Social Skills			
Coordination	30%	43%	30%
Instructing	28%	52%	20%
Negotiation	8%	2%	16%
Persuasion	5%	10%	16%
Service Orientation	35%	48%	12%
Social Perceptiveness	43%	57%	12%
Systems Skills			
Judgment and Decision Making	25%	21%	70%
Systems Analysis	3%	5%	14%
Systems Evaluation	3%	2%	20%
Technical Skills	100/	=0.4	00.4
Equipment Maintenance	10%	7%	0%
Equipment Selection	13%	14%	6%
Installation	10%	7%	0%
Operation and Control	5%	5%	2%
Operation Monitoring	5%	2%	2%
Operations Analysis	3%	10%	24%
Programming	3%	5%	8%
Quality Control Analysis	3%	2%	2%
Repairing	10%	2%	0%
Technology Design	3%	5%	12%
Troubleshooting	15%	17%	14%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

Table 2.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		3	11
Doctoral Degree			4
Master's Degree			3
Work Experience Plus a Bachelor's or Higher Degree	2	2	13
Bachelor's Degree	5	9	18
Associate Degree	1	6	
Postsecondary Vocational Training	2	5	
Work Experience in a Related Occupation	3	2	1
Long-term On-the-job Training	1		
Moderate On-the-job Training	8	6	
Short-term On-the-job Training	18	9	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 2 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

Region II must continue to ensure that training programs and educational programs are current, up-to-date and adaptable to the needs of existing businesses and industries. This training must also fit the needs of growing companies, changing technologies and new companies that locate in the region. A comprehensive program of career advising/career focus such as was provided under the School-To-Career model, needs to be implemented to ensure that students (potential employees) are aware

of the importance of training to enter the workforce and are aware of all career opportunities available. A targeted marketing program is needed to reach students, parents, educators, and business and industry regarding the critical importance, and the potential for the future, of career/technical education. A key goal of the marketing effort should be a partnership that engages all these entities (from student to parent to employer) as active shareholders in workforce development. Specifically, programs need to be maintained or created to fit the areas of growth and the critical skill needs identified above: industrial manufacturing, healthcare (RNs, LPNs, CNAs, and respiratory therapists), production, engineering, welding, and construction. Emerging skills in the automotive, aerospace and defense industries, and industrial maintenance must also be addressed. Targeted areas of employment for the region are aerospace/defense, electronics, research and development technology, manufacturing, life sciences, health care, and construction.

## Action issue 2. How can/should worker skills be generally upgraded in the region?

Region II must continue to leverage the assets located here—community colleges and career centers—to focus on technical skills, soft skills, and work readiness skills. The shortage of guidance counselors must be addressed and the role of counselors redirected in order to focus on advising students about educational choices and careers. The partnership between business, industry and education must be strengthened and made more effective; training programs must be made more accessible to underprivileged youth and workers and WIA Individual Training Accounts (ITAs) refinanced; and the guidelines for WIA eligibility need to be less focused in order to provide greater participation in WIA programs. Among the existing workforce there should be a focus on quality systems such as ISO 9000 and ongoing employee education and skills training and upgrading. In counties such as Marshall, Jackson, and DeKalb where there have been losses of thousands of lowskilled jobs, workers need to be retrained to meet the production and technology jobs available in other parts of the region. A board with representation from all parties should be established to assure stringent goals are met and everyone is accountable. At this time, Region II CareerLinks are allocated a total of only 21 Youth ITAs for the year. A total of only 120 short-term and 475 long-term ITAs are available for Dislocated Workers for the entire 65-county WIA area. No new adult ITAs are allocated at this time. Region II believes the State should work with the Department of Labor to restore funding to these programs at a level that will make them effective once more. In addition, funding should be provided to the CareerLinks within the region to administer meaningful career and skill assessments and interest inventories to adult members of the workforce population. Region II is requesting approximately \$20,000 to assist Career Centers with assessment programs.

# Action issue 3. How can future workers be helped to make better choices about career preparation?

The focus of education at all levels needs to be on learning and not on exit exams and math and science education should be paramount to meet the skills needed in the workforce of today and the future. Effective, valid career interest inventories, career surveys, and personality profiles should be available and administered to students beginning in elementary school to ensure that their education is a true career pathway. Career interest, awareness, and assessment programs must be integrated from Kindergarten through 12th grade, including out of school youth, and must include adult education and adults in transition as well. Business must be more willing to provide mentors, job-shadowing, and apprenticeships for students and educator-in-the workplace experiences for educators. State and federal legislation addressing youth labor laws need to be addressed. The 4x4 program and course of study adopted by the State Department of Education needs to be reassessed to determine if it truly meets the needs of the majority of students and business and industry.

CareerLinks personnel should have hands-on, real time knowledge of the present and future needs of the workforce. Effective LAUNCH and School-To-Career programs will address many of these issues at the K-12 level and effective CareerLinks utilizing aforementioned assessments, staff development, and a reanalysis of what success really means for the workforce will address these issues among the adult population. Region II believes many of the issues with the CareerLinks could be addressed by moving the CareerLinks to the community college campuses.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Yes. Programs that should be available and funded are WorkKeys or similar assessment programs, incumbent worker training programs, Focused Industry Training (FIT) or similar programs, Alabama Industrial Development Training, employment screening, and career readiness programs. Career centers need to be operating efficiently and adequately funded in order to ensure equal accessibility to people in all parts of the region.

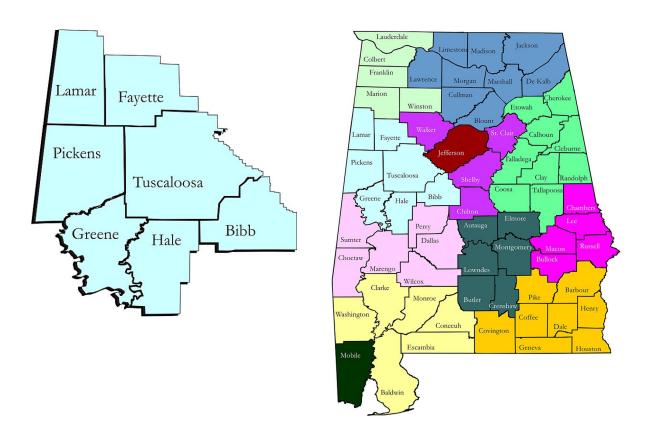
Critical Gaps: The need for a comprehensive in-school career programs at all grade levels such as that provided by the School-To-Career; the need for an Out-of-School Youth (OSY) program for Blount, Cullman, DeKalb, Limestone, and Morgan counties modeled on successful programs such as LAUNCH; programs to address language and cultural barriers particularly in counties such as Marshall, DeKalb, and Blount; and efforts need to be made regionally to partner with temporary employment agencies to provide adequately skilled temporary workers to employers within the region. Faith-based organizations need to be involved in all of the OSY programs. There should be a stringent level of accountability at all levels of workforce development and more and more effective short-term training programs need to be developed. The LAUNCH program needs to be expanded to implement OSY programs in the five counties currently not served and Region II is requesting \$500,000 for expansion of this program. There is strong support for faith-based issues within Region II and we request \$30,000 in seed money to further coordinate faith-based workforce initiatives as required by the state.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

Employers need to adequately communicate their training needs to training providers, participate in the development and implementation of training programs and follow-through with commitments to provide workplace training opportunities and hire workers that complete the programs. Entities within the region must work more closely with the state and better communicate workforce development needs. There must also be closer cooperation between chambers of commerce, economic development agencies, elected officials, community colleges, and other stakeholders in workforce development within Region II. The Advisory Council should play a key role in developing these partnerships and securing this cooperation. At the state and regional levels marketing efforts must be timely and up-to-date and greater efforts need to be made by both state and regional officials to define and facilitate the role of faith-based organizations in workforce development. The State should also enforce standards of program communication and customer service among Career Centers in the region and throughout the state. Efforts need to be made at the State level to address personnel and policy issues that are preventing One Stops from operating effectively, efficiently, and consistently within our region and throughout the state. The state also

needs to ensure that GED and Adult Education programs remain adequately funded to meet present and future demands. Region II is requesting funding and support for a comprehensive in school program modeled after School-To-Career. Such a program includes activities such as CHOICES, WorkKeys Testing, Educators in the Workplace, Junior Achievement, job shadowing, industry tours, career fairs, and funding for innovative career technical software in the classroom and requires a budget of approximately \$1.5 million per year.

# **WIAA Region 3 Workforce Report**



# **Summary**

- Region 3 had a 3.9 percent unemployment rate in August 2005, with about 5,100 unemployed. However, the seven-county region has a 37,400-strong available labor pool that is looking for better jobs and includes 32,300 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 58 percent are prepared for 20 or more minutes longer and 44 percent will go 20 or more extra miles.
- In 2000, about 16,300 residents commuted out of the region for work, compared to 7,700 incommuters. Most commuters worked in other Alabama counties, mainly Jefferson. Significant commuting within the region suggests that roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is slightly below the state as a whole. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 74 percent and 18 percent, respectively, for the region. Tuscaloosa County stands out with roughly 79 percent high school graduates and 24 percent bachelor's or higher degree holders.

- Employment is currently growing faster than the labor force and population. While this may reduce commuter outflow, it also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting, but communities must be prepared to invest in amenities and infrastructure to support population growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing, health care and social assistance, retail trade, educational services, and accommodation and food services. These five industries provided 60,740 jobs, 63 percent of the region total in the second quarter of 2004. Two of these leading employers—manufacturing and health care and social assistance—had higher average monthly wages than the \$2,626 regional average.
- On average about 4,800 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 200. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Five occupations are both high-demand and fast-growing: Electricians; Inspectors, Testers, Sorters, Samplers, and Weighers; Receptionists and Information Clerks; Welders, Cutters, Solderers, and Brazers; and Cleaners of Vehicles and Equipment. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and Laborers and Freight, Stock, and Material Movers, Hand. The top five fast-growing occupations are Grinding and Polishing Workers, Hand; Radiologic Technologists and Technicians; Industrial Engineers; Home Health Aides; and Bill and Account Collectors.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The top five are all health occupations and led by Anesthesiologists. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 40 selected high-demand, 29 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Six occupations are both high-earning and fast-growing: Pharmacists; Industrial Engineers; Medical and Health Services Managers; Management Analysts; Computer Systems Analysts; and Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

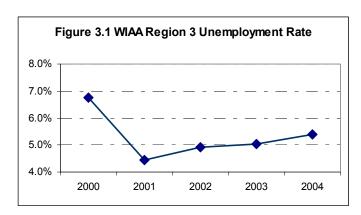
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. These facts strongly emphasize the need to raise educational attainment in the region and present challenges to workforce development. They also present opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has low population and labor force growth rates is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

# Workforce Supply

# **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 3.1 shows labor force information for Region 3 and its seven counties for 2004 and August 2005. Relatively larger increases in the number of employed residents relative to labor force size lowered unemployment rate in 2005 for the region and its counties. The labor force shrank in Fayette, Lamar, and Pickens counties; Lamar County's number of employed residents fell, but by much less than its labor force.

Unemployment rates in 2004 ranged between 4.6 percent and 8.4 percent for the counties, with 5.4 percent for the region. The unemployment range in August 2005 was 3.5 percent to 6.1 percent, with a 3.9 percent rate for the region. Only Tuscaloosa County had a lower unemployment rate than the state's 4.2 percent. Annual unemployment rates for 2000 to 2004 are shown in Figure 3.1. The region's unemployment dropped to 4.4 percent in 2001 and slowly rose to 5.4 percent in 2004. Employment in the region averaged 96,800 quarterly from the



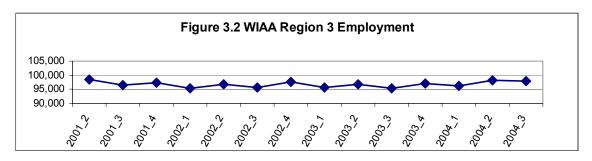
Source: Alabama Department of Industrial Relations.

second quarter of 2001 to third quarter 2004 (Figure 3.2). The low point was recorded in the first quarter of 2002, but employment is recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.

Table 3.1 WIAA Region 3 Labor Force Information

		2004							
	Labor Force	Employed	Unemployed	Rate					
Bibb	8,945	8,463	482	5.39%					
Fayette	7,942	7,406	536	6.75%					
Greene	3,603	3,300	303	8.41%					
Hale	7,156	6,652	504	7.04%					
Lamar	6,406	5,880	526	8.21%					
Pickens	8,109	7,499	610	7.52%					
Tuscaloosa	84,159	80,305	3,854	4.58%					
WIAA Region 3	126,320	119,505	6,815	5.40%					
Alabama	2,148,766	2,029,314	119,452	5.56%					
U.S.	147,401,000	139,252,000	8,149,000	5.53%					
	2005 August								
	Labor Force	Employed	Unemployed	Rate					
Bibb	8,948	8,542	406	4.54%					
Fayette	7,869	7,536	333	4.23%					
Greene	3,657	3,434	223	6.10%					
Hale	7,270	6,922	348	4.79%					
Lamar	6,088	5,782	306	5.03%					
Pickens	7,938	7,511	427	5.38%					
Tuscaloosa	86,587	83,567	3,020	3.49%					
WIAA Region 3	128,357	123,294	5,063	3.94%					
Alabama	2,155,745	2,065,528	90,217	4.18%					
U.S.	150,469,000	143,142,000	7,327,000	4.87%					

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **Commuting Patterns**

In 2000, about 8,560 more people commuted out of the region for work than commuted in (Table 3.2). There was significant commuting within the region as well. Table 3.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 53 percent of resident workers; between 20 and 40 minutes for 25 percent; and more than 40 minutes for 18 percent. About 3 percent of workers take more than an hour.

The commute is less than 10 miles for 44 percent of workers and roughly 26 percent travel 10 to 25 miles. About 25 percent of workers travel more than 25 miles one-way, with over 6 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

**Table 3.2 WIAA Region 3 Commuting Patterns** 

Area	Inflow, 2000			Outflow	, 2000
	Number	Percent		Number	Percent
Bibb	788	10.2		3,460	21.3
Fayette	578	7.5		1,715	10.5
Greene	184	2.4		626	3.9
Hale	455	5.9		808	5.0
Lamar	831	10.8		1,658	10.2
Pickens	326	4.2		1,326	8.2
Tuscaloosa	4,544	59.0		6,676	41.0
WIAA Region 3	7,706	100.0		16,269	100.0

Average commute time (one-way), 2004	Percent of workers
Less than 20 minutes	53.3
20 to 40 minutes	24.8
40 minutes to an hour	15.4
More than an hour	2.9
Average commute distance (one-way), 2004	Percent of workers
Less than 10 miles	43.8
10 to 25 miles	26.3
25 to 45 miles	19.0
More than 45 miles	6.3

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

#### **Population**

The Region 3 population estimate of 270,091 for 2004 is 0.7 percent more than was recorded for 2000 (Figure 3.3 and Table 3.3). Hale County led population growth with 6.3 percent, but four counties lost residents. The region's population is projected to grow 6.3 percent in this decade to about 285,150 by 2010. Population will grow fastest in Bibb County while Greene County's population is expected to shrink further. Faster employment growth will reduce commuter outflow and place less of a burden on the region's roads. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents.

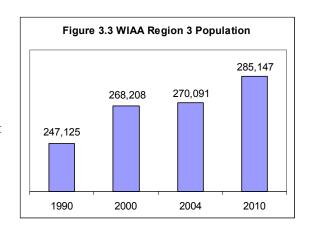


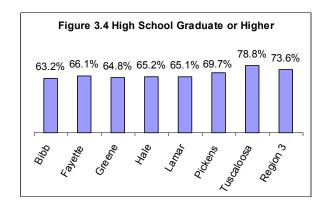
Table 3.3 WIAA Region 3 Population

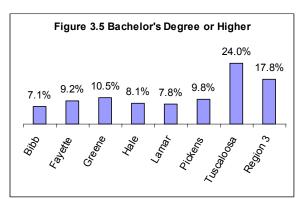
	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Bibb	16,576	20,826	21,317	2.4	24,861	19.4
Fayette	17,962	18,495	18,273	-1.2	18,795	1.6
Greene	10,153	9,974	9,746	-2.3	9,688	-2.9
Hale	15,498	17,185	18,275	6.3	18,892	9.9
Lamar	15,715	15,904	14,975	-5.8	16,105	1.3
Pickens	20,699	20,949	20,401	-2.6	21,259	1.5
Tuscaloosa	150,522	164,875	167,104	1.4	175,547	6.5
WIAA Region 3	247,125	268,208	270,091	0.7	285,147	6.3
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

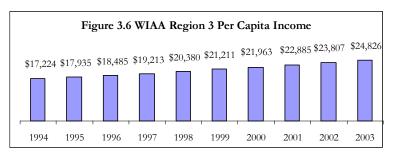
Educational attainment of Region 3 residents who are 25 years old and over is shown below in Table 3.4 and Figures 3.4 and 3.5. About 74 percent graduated from high school and nearly 18 percent hold a bachelor's or higher degree. Tuscaloosa County stands out with roughly 79 percent high school graduates and 24 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.





## Per Capita Income

Per capita income (PCI) in Region 3 was at \$24,826 in 2003 (Figure 3.6), 44 percent higher than in 1994, and \$1,680 or 6 percent lower than the Alabama average of \$26,505. The PCI was highest in Tuscaloosa County (\$27,845); PCIs for the other counties were below the state average. Hale County had the lowest PCI with \$18,368.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

Table 3.4 Educational Attainment in 2000, Population 25 Years and Over

	Bibb	Fayette	Greene	Hale	Lamar	Pickens	Tuscaloosa	Region 3
Total	13,540	12,579	6,204	10,591	10,758	13,536	99,039	166,247
No schooling completed	261	177	239	258	107	283	1,402	2,727
Nursery to 4th grade	137	209	183	147	94	182	712	1,664
5th and 6th grade	484	395	249	359	340	399	1,380	3,606
7th and 8th grade	901	918	284	648	876	646	2,924	7,197
9th grade	862	793	284	510	632	583	3,005	6,669
10th grade	915	742	316	603	847	745	3,908	8,076
11th grade	648	540	305	525	442	620	3,812	6,892
12th grade, no diploma	776	491	322	633	421	650	3,838	7,131
High school graduate/equivalent	4,838	4,404	2,165	3,803	4,036	5,110	28,115	52,471
Some college, less than 1yr	718	829	266	631	646	672	6,177	9,939
Some college, 1+ yrs, no degree	1,355	1,344	734	1,094	956	1,612	14,597	21,692
Associate degree	683	580	205	522	523	711	5,365	8,589
Bachelor's degree	551	723	457	541	583	873	14,193	17,921
Master's degree	322	326	169	229	232	367	6,271	7,916
Professional school degree	67	79	21	62	23	71	1,586	1,909
Doctorate degree	22	29	5	26	0	12	1,754	1,848

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

## Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave

lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 3 had an underemployment rate of 26.2 percent in 2004. Applying this rate to August 2005 labor force data means that about 32,300 employed residents were underemployed (Table 3.5). Adding the unemployed gives a total available labor pool of about 37,400 for the region. This pool is more than seven times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 6.3 percent for Fayette County to 37.7 percent for Lamar. Tuscaloosa County has the largest available labor and Fayette County has the smallest.

Table 3.5 Available Labor in WIAA Region 3

	Region 3	<u>Bibb</u>	<u>Fayette</u>	Greene	<u>Hale</u>	Lamar	<u>Pickens</u>	<u>Tuscaloosa</u>
Labor Force	128,357	8,948	7,869	3,657	7,270	6,088	7,938	86,587
Employed	123,294	8,542	7,536	3,434	6,922	5,782	7,511	83,567
Underemployment rate	26.2%	23.5%	6.3%	29.1%	30.0%	37.7%	23.7%	28.2%
Underemployed workers	32,303	2,007	475	999	2,077	2,180	1,780	23,566
Unemployed	5,063	406	333	223	348	306	427	3020
Available labor pool	37,366	2,413	808	1,222	2,425	2,486	2,207	26,586

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

#### **Industry Mix**

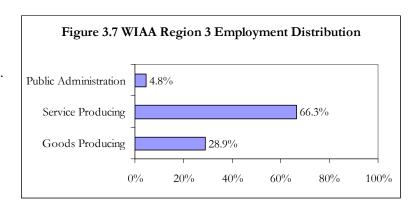
The manufacturing sector was the leading employer with about 17,300 jobs in the second quarter of 2004 (Table 3.6). Rounding up the top five industries by employment are health care and social assistance; retail trade; educational services; and accommodation and food services. These five industries provided 60,736 jobs, 63 percent of the region total. The average monthly wage across all industries in the region was \$2,626; two of the leading employers paid more than this average. The highest average monthly wages were for mining (\$5,103), utilities (\$3,942), and manufacturing (\$3,704). Accommodation and food services paid the least at \$1,015. Mining also had the highest average monthly new hire wages with \$3,813, followed by manufacturing with \$2,718 and utilities with \$2,671. Accommodation and food services paid the least average monthly new hire wages with \$718.

Table 3.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Average Monthly Wage	Average Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,507	1.56%	15	\$2,110	\$1,589
21 Mining	2,752	2.85%	11	\$5,103	\$3,813
22 Utilities	496	0.51%	19	\$3,942	\$2,671
23 Construction	6,398	6.62%	6	\$2,735	\$2,299
31-33 Manufacturing	17,286	17.89%	1	\$3,704	\$2,718
42 Wholesale Trade	2,146	2.22%	14	\$3,240	\$2,179
44-45 Retail Trade	11,686	12.09%	3	\$1,880	\$1,203
48-49 Transportation and Warehousing	2,918	3.02%	9	\$2,677	\$2,109
51 Information	1,161	1.20%	17	\$2,929	\$1,963
52 Finance and Insurance	2,302	2.38%	13	\$3,145	\$2,175
53 Real Estate and Rental and Leasing	1,366	1.41%	16	\$2,089	\$1,454
54 Professional, Scientific, and Technical Services	2,735	2.83%	12	\$2,891	\$1,936
55 Management of Companies and Enterprises	337	0.35%	20	\$1,997	\$1,514
56 Administrative and Support and Waste					
Management and Remediation Services	3,493	3.61%	8	\$1,696	\$1,188
61 Educational Services	11,428	11.83%	4	\$2,562	\$1,434
62 Health Care and Social Assistance	12,562	13.00%	2	\$2,646	\$1,670
71 Arts, Entertainment, and Recreation	927	0.96%	18	\$1,469	\$997
72 Accommodation and Food Services	7,774	8.05%	5	\$1,015	\$718
81 Other Services (except Public Administration)	2,756	2.85%	10	\$1,661	\$1,205
92 Public Administration	4,600	4.76%	7	\$2,603	\$1,650
ALL INDUSTRIES	96,630	100.00%		\$2,626	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

By broad industry classification, service producing industries provided about 66 percent of jobs in second quarter 2004 (Figure 3.7). Goods producing industries were next with 29 percent and public administration nearly 5 percent. This distribution is for all covered jobs in the region.

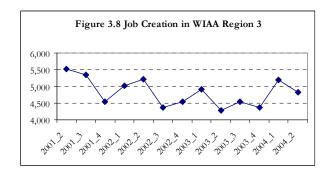


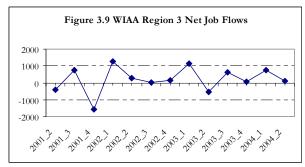
State of the Alabama Workforce I

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## Job Creation and Net Job Flows

On average, about 4,800 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure 3.8 shows job creation on a slightly downward trend over the period, but clearly rising since the second quarter of 2003. Quarterly net job flows averaged 202 in the same period (Figure 3.9). Net job flows have ranged from a loss of almost 1,600 to a gain of about 1,100. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table 3.7 shows the top 40 of about 440 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; retail trade; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and Laborers and Freight, Stock, and Material Movers, Hand.

#### **Fast-Growing Occupations**

The top 29 of occupations ranked by projected growth of employment are listed in Table 3.8. More than half of these occupations are in health or health support, construction, installation and maintenance, and production. The top five fast-growing occupations are Grinding and Polishing Workers, Hand; Radiologic Technologists and Technicians; Industrial Engineers; Home Health Aides; and Bill and Account Collectors. Five occupations are both high-demand and fast-growing: Electricians; Inspectors, Testers, Sorters, Samplers, and Weighers; Receptionists and Information Clerks; Welders, Cutters, Solderers, and Brazers; and Cleaners of Vehicles and Equipment.

Table 3.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annual Average Job Openings			
Occupation	Total	Due to Growth	Due to Separations	
Cashiers	265	50	215	
Retail Salespersons	175	50	125	
Combined Food Preparation and Serving Workers	155	50	105	
Waiters and Waitresses	135	30	105	
Laborers and Freight, Stock, and Material Movers, Hand	100	15	85	
Secretaries, Except Legal, Medical, and Executive	90	25	65	
Office Clerks, General	85	25	60	
General and Operations Managers	80	30	50	
Registered Nurses	80	40	40	
Teacher Assistants	75	35	40	
Truck Drivers, Heavy and Tractor-Trailer	75	40	35	
Elementary School Teachers, Except Special Education	65	30	35	
Electricians**	55	35	20	
Secondary School Teachers, Except Special Education	50	20	30	
Bookkeeping, Accounting, and Auditing Clerks	50	15	35	
Janitors and Cleaners, Except Maids	50	20	30	
Child Care Workers	50	20	30	
First-Line Supervisors/Managers, Retail Sales	50	20	30	
Cooks, Institution and Cafeteria	45	15	30	
Sales Representatives, Except Technical and Scientific Products	45	20	25	
Licensed Practical and Licensed Vocational Nurses	45	20	25	
Nursing Aides, Orderlies, and Attendants	45	25	20	
Maintenance and Repair Workers, General	45	20	25	
Maids and Housekeeping Cleaners	45	25	20	
Landscaping and Groundskeeping Workers	40	15	25	
Construction Laborers	40	25	15	
Inspectors, Testers, Sorters, Samplers, and Weighers**	35	20	15	
Customer Service Representatives	35	15	20	
First-Line Supervisors/Managers of Office and Administrative Support Workers	35	10	25	
Receptionists and Information Clerks**	35	20	15	
Automotive Service Technicians and Mechanics	30	10	20	
Welders, Cutters, Solderers, and Brazers**	30	15	15	
Carpenters	30	15	15	
Cleaners of Vehicles and Equipment**	30	15	15	
Middle School Teachers, Except Special Education	30	15	15	
First-Line Supervisors/Managers of Production and Operating Workers	30	15	15	
Cooks, Restaurant	30	10	20	
Truck Drivers, Light or Delivery Services	30	20	10	
Executive Secretaries and Administrative Assistants	25	10	15	
Food Preparation Workers	25	10	15	

Note: A minimum of 25 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

Table 3.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Employ	ment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Grinding and Polishing Workers, Hand	120	220	83.3	6.25	15
Radiologic Technologists and Technicians	130	190	46.2	3.87	10
Industrial Engineers	110	160	45.5	3.82	10
Home Health Aides	520	740	42.3	3.59	25
Bill and Account Collectors	350	490	40.0	3.42	20
Personal and Home Care Aides	210	290	38.1	3.28	15
Dental Assistants	160	220	37.5	3.24	10
Electricians**	910	1,250	37.4	3.23	55
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	430	590	37.2	3.21	20
Social and Human Service Assistants	270	370	37.0	3.20	15
Preschool Teachers, Except Special Education	310	420	35.5	3.08	15
Packaging and Filling Machine Operators and Tenders	170	230	35.3	3.07	10
Telecommunications Line Installers and Repairers	90	120	33.3	2.92	10
Cleaners of Vehicles and Equipment**	420	550	31.0	2.73	30
Welders, Cutters, Solderers, and Brazers**	550	720	30.9	2.73	30
Inspectors, Testers, Sorters, Samplers, and Weighers**	680	890	30.9	2.73	35
Demonstrators and Product Promoters	130	170	30.8	2.72	10
Legal Secretaries	200	260	30.0	2.66	10
Management Analysts	200	260	30.0	2.66	10
Sheet Metal Workers	270	350	29.6	2.63	15
Sales Reps., Wholesale & Manufacturing, Technical & Scientific Products	170	220	29.4	2.61	10
Hotel, Motel, and Resort Desk Clerks	170	220	29.4	2.61	15
Computer Systems Analysts	210	270	28.6	2.54	10
Coaches and Scouts	140	180	28.6	2.54	10
Plumbers, Pipefitters, and Steamfitters	470	600	27.7	2.47	20
Pharmacists	220	280	27.3	2.44	10
Receptionists and Information Clerks**	710	900	26.8	2.40	35
HelpersElectricians	190	240	26.3	2.36	15
Medical and Health Services Managers	190	240	26.3	2.36	10

Note: Selection criteria are annual growth rate of at least 2.30 percent and a minimum of 10 average annual job openings. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

## **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 3.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The top five are health occupations. The selected high-earning occupations are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Six occupations are both high-earning and fast-growing: Pharmacists; Industrial Engineers; Medical and Health Services Managers; Management Analysts; Computer Systems Analysts; and Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

**Table 3.9 Selected High-Earning Occupations** 

Occupation	Mean Annual Salary (\$)
Anesthesiologists	196,976
Surgeons	180,856
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Aerospace Engineers	84,344
Pharmacists	83,075
Chiropractors	82,514
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Sales Managers	78,957
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
	76,500 76,502
Chemical Engineers  Financial Management	
Financial Managers Medical and Health Services Managers	76,003
Electrical Engineers	72,925
8	72,904
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Petroleum Engineers	71,906
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Computer Programmers	66,789
Operations Research Analysts	66,518
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
First-Line Supervisors/Managers of Non-Retail Sales Workers	63,149
Economists	62,005
Physical Therapists	61,714
Transportation, Storage, and Distribution Managers	61,630
Public Relations Managers	60,944

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 3 currently has a low unemployment rate, but it also has a 37,400-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of 32,300 underemployed and 5,100 unemployed. The region's underemployed workers are willing to commute farther and longer; 58 percent are prepared for 20 or more minutes longer and 44 percent for 20 or more extra miles.

A lack of job opportunities in their areas and low wages at the available jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also mentioned frequently. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could reduce commuter outflow. The availability of jobs in the region presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is low relative to the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force to meet increasing employment demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will raise labor force participation and may be very effective given the region's low population growth rate.

## **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 3.10 shows the percentage of selected occupations in WIAA Region 3 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 3.10 does not address such cross-occupational skill importance comparisons.

Table 3.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	*	•	*
Active Learning	35%	41%	72%
Active Listening	75%	90%	84%
Critical Thinking	55%	59%	92%
Learning Strategies	33%	21%	14%
Mathematics	30%	38%	32%
Monitoring	38%	31%	40%
Reading Comprehension	70%	83%	96%
Science	3%	10%	34%
Speaking	63%	69%	68%
Writing	38%	48%	46%
Complex Problem Solving Skills			
Complex Problem Solving	3%	14%	36%
Resource Management Skills			
Management of Financial Resources	3%	0%	16%
Management of Material Resources	5%	0%	4%
Management of Personnel Resources	10%	0%	16%
Time Management	45%	52%	52%
Social Skills			
Coordination	30%	34%	32%
Instructing	35%	41%	24%
Negotiation	5%	3%	16%
Persuasion	5%	10%	16%
Service Orientation	35%	24%	12%
Social Perceptiveness	43%	45%	14%
Systems Skills			
Judgment and Decision Making	18%	28%	68%
Systems Analysis	0%	3%	14%
Systems Evaluation	3%	3%	24%
Technical Skills	450/	240/	00.1
Equipment Maintenance	15%	24%	0%
Equipment Selection	23%	34%	4%
Installation	15%	24%	0%
Operation and Control	15%	14%	4%
Operation Monitoring	10%	14%	2%
Operations Analysis	5%	10%	18%
Programming	0%	0%	4%
Quality Control Analysis	8%	17%	4%
Repairing	15%	21%	0%
Technology Design	0%	0%	10%
Troubleshooting	13%	28%	12%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; and Waiters and

Waitresses. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

## **Education and Training Issues**

Educational attainment in WIAA Region 3 is slightly below that of the state as a whole. Seventy-four percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, almost 18 percent have bachelor's or higher degree; 19 percent of Alabamians do. Tuscaloosa County stands out with 79 percent high school graduates and 24 percent bachelor's or higher degree holders. All the other counties have lower educational attainment levels than the state. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the region.

Table 3.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training. Work experience in a related occupation training is the minimum requirement for most fast-growing jobs. Some form of on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training.

The finding that basic skills are important for all the selected occupations (Table 3.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

Table 3.11 Number of Selected Occupations with Most Common Education/Training Requirement

Most Common Education/Training Requirements Categories	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
First Professional Degree		1	10
Doctoral Degree			2
Master's Degree			5
Work Experience Plus a Bachelor's or Higher Degree	1	2	13
Bachelor's Degree	3	2	16
Associate Degree	1	1	
Postsecondary Vocational Training	2	2	
Work Experience in a Related Occupation	3		3
Long-term On-the-job Training	4	6	
Moderate On-the-job Training	10	7	1
Short-term On-the-job Training	16	8	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills for a region that has low population and labor force growth rates is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the June 2005 Annual Report of the Region 3 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

- 1. Throughout the region an emphasis should be placed on instilling the "soft skills" (workplace ethics, problem-solving, team-building, communications) that apply to essentially all industries, including current and future.
- 2. The state's 10-week Focused Industry Training basic workplace skills training should be funded in the seven counties and made widely available as a means of upgrading the productivity of the region's workforce, and to support new and expanding industries.
- 3. To ensure that worker skills meet industry requirements, a region wide WorkKeys initiative should be implemented in conjunction with all preemployment, adult education, short-term training, and technical training. Targeted instruction should be made readily available through all local workforce development service providers to identify and address skill gaps. This will ensure that all individuals that are assessed through the WorkKeys system possess the skills needed for immediate employment or training in demand industries.
- 4. Much greater participation is needed in the Industry-Education Alliances and funding made available for alliance initiatives. The region's two-year colleges are committed to meeting the region's workforce training needs, and need increased and more stable support for vocational, technical, and occupational training.
- 5. Ongoing opportunities for skill upgrades must be aggressively developed for both industry and workers in order to stay abreast of technology and compete in the global economy. Partnerships with the community colleges to provide guidance and upgrading equipment must be maintained in a structured sustainable way.

Region 3 needs a comprehensive workforce development system. Training is in place through the career centers and higher education-based training programs to address most of these worker skills issues, but efforts should be coordinated through a comprehensive system. Region 3 Advisory Council aims to develop such a system by articulating business/industry training needs, making sure training options are available and presenting a united front with regard to soliciting funding.

A variety of federal/state workforce initiatives dating back to the 1960s have produced mixed results. Therefore, there is a great deal of cynicism by private businesses and industries about these efforts. Participation by the private sector in the planning process, through the Region 3 Advisory Council (endorsed by the state WFD planning system) is crucial to successful implementation.

Action issue 3. How can future workers be helped to make better choices about career preparation?

- 1. As mentioned earlier, a strong, effective career education focus in the school systems is critically important. An expansion of job shadowing and the Choices programming offered through some chambers of commerce would achieve positive results, as could other career education initiatives.
- 2. Greater emphasis on the relationship between math and science and future career choices should be emphasized during middle school, just before parents and students make curriculum choices for high school.
- 3. The media can play a supportive role by highlighting careers in growing fields and explaining entry requirements.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

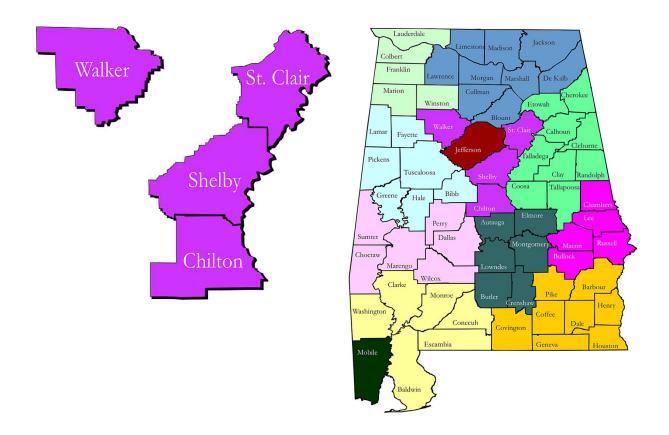
Yes. Region 3 Advisory Council supports the state level efforts in defining and developing a state recognized workforce competency credentialing system including the Alabama Certified Worker through the Focused Industry Training Program as well as expanded WorkKeys assessment and targeted instruction.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

- 1. <u>Regional Advisory Council</u>—To maintain momentum in their role of Regional Advisory Council members, consistent and continuous evidence must be provided by the local Workforce Board to indicate that their efforts are having an impact on decisions and policies made at the state level.
- 2. <u>Employers</u>—Employers should regularly communicate their current and projected workforce training needs to the Region 3 Advisory Council and provide candid feedback on training

- effectiveness. Employer participation in the Industry-Education Alliances is essential for those alliances to function.
- 3. <u>Partner agencies</u>—These agencies should share information with each other about workforce training plans and initiatives, and combine resources to maximize benefit to job seekers and businesses. An Internet data system of all resources that is accessible to both businesses and job seekers could assist in the connection of skilled workers to job openings.
- 4. <u>Elected officials</u>—Should become familiar with workforce development issues. Bring about policy changes and help identify and leverage resources to create a seamless workforce system in the region.
- 5. <u>Faith- and community-based organizations</u>—These organizations have unique and valuable capabilities. Often, they have an opportunity to provide or communicate information and services to individuals who could benefit from training in order to obtain the skills to meet the needs of business and industry.
- 6. News media—As a public service, the media can help highlight career opportunities and the education and training requirements for career entry and long-term success.

# **WIAA Region 4 Workforce Report**



## **Summary**

- Region 4 had a 3.2 percent unemployment rate in August 2005, with about 5,500 unemployed. However, the four-county region has a 47,600-strong available labor pool that is looking for better jobs and includes 42,100 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 48 percent are prepared for 20 or more minutes longer and 41 percent will go 20 or more extra miles.
- In 2000, about 71,540 residents commuted out of the region for work, compared to 30,140 incommuters. Most commuters worked in Jefferson County, with nearly 50,000 coming from Shelby and St. Clair counties. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is higher than for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 77 percent and 22 percent, respectively, for the region. Shelby County stands out with roughly 87 percent high school graduates and 37 percent bachelor's or higher degree holders.

- Employment is currently growing faster than the labor force. While this might reduce commuter outflow, it also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting. Communities in this region, except for Walker County, are experiencing rapid population growth. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are retail trade, manufacturing, health care and social assistance, educational services, and accommodation and food services. These five industries provided 54,813 jobs, 51 percent of the region total in the second quarter of 2004. Of these leading employers, only manufacturing had higher average monthly wages than the \$2,850 regional average.
- On average about 6,270 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 1,070. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Seven occupations are both high-demand and fast-growing: Receptionists and Information Clerks; Teacher Assistants; Middle School Teachers; Elementary School Teachers; Secondary School Teachers; Bus Drivers, School; and Child Care Workers. The teaching occupations listed do not include special education. The top five high-demand occupations are Cashiers; Combined Food Preparation and Serving Workers; Retail Salespersons; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses. The top five fast-growing occupations are Computer Software Engineers, Systems Software; Computer Software Engineers, Applications; Preschool Teachers; Choreographers; and Medical Assistants.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Four of the top five are health occupations. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 35 selected high-demand, 35 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Five occupations are both high-earning and fast-growing: Computer Software Engineers, Applications; Public Relations Managers; Management Analysts; Computer Systems Analysts; and Education Administrators, Elementary and Secondary School.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

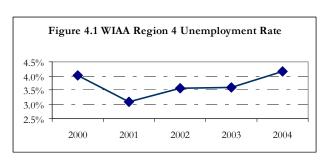
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This strongly emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Workforce Supply

## **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 4.1 shows labor force information for Region 4 and its four counties for 2004 and August 2005. A large increase in the number of employed residents and a slight decrease in labor force size lowered unemployment rate in 2005 for the region and its counties. The labor force grew only in Shelby County.

Unemployment rates in 2004 ranged between 3.2 percent and 6.1 percent for the counties, with 4.2 percent for the region. The unemployment range in August 2005 was 2.7 percent to 4.2 percent, with a 3.2 percent rate for the region. Only Walker County had a comparable unemployment rate to the state's 4.2 percent. Annual unemployment rates for 2000 to 2004 are shown in Figure 4.1. The region's unemployment dropped to 3.1 percent in 2001 and slowly rose to 4.2



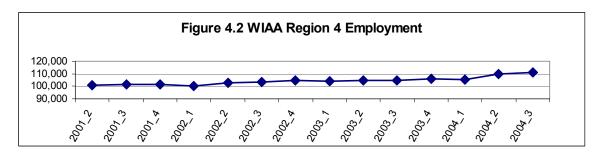
Source: Alabama Department of Industrial Relations.

percent in 2004. Employment in the region averaged 104,350 quarterly from the second quarter of 2001 to third quarter 2004 (Figure 4.2). Employment, which refers to the number of full-time and part-time jobs, has been steadily rising with increasing economic activity.

Table 4.1 WIAA Region 4 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Chilton	19,690	18,781	909	4.62%
Shelby	89,425	86,601	2,824	3.16%
St. Clair	32,787	31,213	1,574	4.80%
Walker	30,760	28,898	1,862	6.05%
WIAA Region 4	172,662	165,493	7,169	4.15%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
_		2005 August		
	Labor Force	Employed	Unemployed	Rate
Chilton	19,656	18,957	699	3.56%
Shelby	89,829	87,411	2,418	2.69%
St. Clair	32,618	31,505	1,113	3.41%
Walker	30,455	29,169	1,286	4.22%
WIAA Region 4	172,558	167,042	5,516	3.20%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **Commuting Patterns**

In 2000, about 41,400 more people commuted out of the region for work than commuted in (Table 4.2). There was significant commuting within the region as well. Table 4.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 53 percent of resident workers; between 20 and 40 minutes for 25 percent; and more than 40 minutes for 18 percent. About 3 percent of workers take more than an hour.

Most of the commuter outflow was into Jefferson County. More residents of St. Clair and Shelby counties worked in Jefferson than in their own counties. Net outflows to Jefferson County are almost 20,000 for Shelby and 11,500 for St. Clair.

The commute is less than 10 miles for 44 percent of workers and roughly 26 percent travel 10 to 25 miles. About 25 percent of workers travel more than 25 miles one-way, with over 6 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

Table 4.2 WIAA Region 4 Commuting Patterns

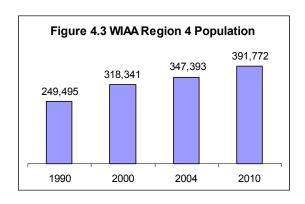
Area	Inflow, 2000		Outflow	, 2000		
	Number	Percent		Number	Percent	
Chilton	1,556	5.2		5,275	7.4	
St. Clair	3,977	13.2		15,845	22.2	
Shelby	22,004	73.0		40,602	56.8	
Walker	2,605	8.6		9,822	13.7	
WIAA Region 4	30,142	100.0		71,544	100.0	
Average commute time (one-way), 2004  Less than 20 minutes 20 to 40 minutes 40 minutes to an hour  More than an hour			Percent o. 50 26 14	.7 .4 .4		
Average commut	Average commute distance (one-way), 2004		Percent of	f workers		
Less than 10 miles			37.7			
10 to	25 miles			32.7		
25 to	45 miles			14.8		
More	than 45 miles			8	.8	

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

## **Population**

The Region 4 population estimate of about 347,400 for 2004 is 9.1 percent more than was recorded for 2000 (Figure 4.3 and Table 4.3). Shelby County led population growth with 15.6 percent, but Walker County lost residents. The region's population is projected to grow 23 percent in this decade to about 392,000 by 2010. Population will grow fastest in Shelby County and slowest in Walker County. Faster employment growth will reduce commuter outflow and place less of a burden on the region's roads. Communities that experience rapid job gains



should invest in amenities and infrastructure to attract new residents.

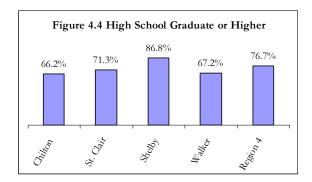
#### **Educational Attainment**

Educational attainment of Region 4 residents who are 25 years old and over is shown below in Table 4.4 and Figures 4.4 and 4.5. Nearly 77 percent graduated from high school and 22 percent hold a bachelor's or higher degree. Shelby County stands out with almost 87 percent high school graduates and 37 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

Table 4.3 WIAA Region 4 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Chilton	32,458	39,593	41,466	4.7	47,398	19.7
Shelby	99,358	143,293	165,677	15.6	191,474	33.6
St. Clair	50,009	64,742	70,245	8.5	80,009	23.6
Walker	67,670	70,713	70,005	-1.0	72,891	3.1
WIAA Region 4	249,495	318,341	347,393	9.1	391,772	23.1
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.



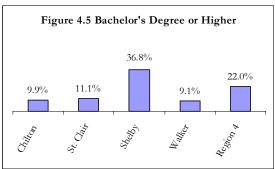


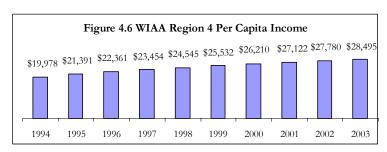
Table 4.4 Educational Attainment in 2000, Population 25 Years and Over

	Chilton	St. Clair	Shelby	Walker	Region 4
Total	25,902	43,101	94,185	47,919	211,107
No schooling completed	359	463	628	732	2,182
Nursery to 4th grade	249	309	240	412	1,210
5th and 6th grade	890	849	1,006	1,387	4,132
7th and 8th grade	1,647	2,382	1,994	3,072	9,095
9th grade	1,531	1,944	1,915	2,913	8,303
10th grade	1,652	2,284	2,242	2,733	8,911
11th grade	1,288	2,202	1,955	2,381	7,826
12th grade, no diploma	1,141	1,920	2,406	2,083	7,550
High school graduate/equivalent	9,264	14,921	21,671	16,647	62,503
Some college, less than 1yr	1,579	3,174	5,735	2,787	13,275
Some college, 1+ yrs, no degree	2,663	5,579	15,064	5,712	29,018
Associate degree	1,065	2,283	4,680	2,684	10,712
Bachelor's degree	1,530	3,251	24,080	2,566	31,427
Master's degree	713	1,125	7,246	1,382	10,466
Professional school degree	190	330	2,293	327	3,140
Doctorate degree	141	85	1,030	101	1,357

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

## Per Capita Income

Per capita income (PCI) in Region 4 was at \$28,495 in 2003 (Figure 4.6), 43 percent higher than in 1994, and almost \$2,000 or 8 percent higher than the Alabama average of \$26,505. The PCI was highest in Shelby County (\$34,697); PCIs for the other counties were below the state average. Chilton County had the lowest PCI with \$21,416.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

## Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 4 had an underemployment rate of 25.2 percent in 2004. Applying this rate to August 2005 labor force data means that about 42,100 employed residents were underemployed (Table 4.5). Adding the unemployed gives a total available labor pool of about 47,600 for the region. This pool is 8.6 times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 20 percent for Shelby County to 31.3 percent for St. Clair. Shelby County has the largest available labor and Chilton County has the smallest.

Table 4.5 Available Labor in WIAA Region 4

	Region 4	Chilton	Shelby	St. Clair	Walker
Labor Force	172,558	19,656	89,829	32,618	30,455
Employed	167,042	18,957	87,411	31,505	29,169
Underemployment rate	25.2%	24.7%	20.0%	31.3%	25.8%
Underemployed workers	42,095	4,682	17,482	9,861	7,526
Unemployed	5,516	699	2418	1,113	1286
Available labor pool	47,611	5,381	19,900	10,974	8,812

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

## Workforce Demand

#### **Industry Mix**

The retail trade sector was the leading employer with roughly 15,000 jobs in the second quarter of 2004 (Table 4.6). Rounding up the top five industries by employment are manufacturing; health care and social assistance; educational services; and accommodation and food services. These five industries provided 54,813 jobs, 51 percent of the region total. The average monthly wage across all industries in the region was \$2,850. Of the leading employers, only manufacturing paid more than this average. The highest average monthly wages were for utilities (\$6,248), finance and insurance (\$4,388), and mining (\$4,335). Accommodation and food services paid the least at \$1,150. Utilities also had the highest average monthly new hire wages with \$4,312, followed by mining with \$4,148. Accommodation and food services paid the least average monthly new hire wages with \$827.

By broad industry classification, service producing industries provided about 75 percent of all covered jobs in the region in second quarter 2004 (Figure 4.7). Goods producing industries were next with 21 percent and public administration 4 percent.

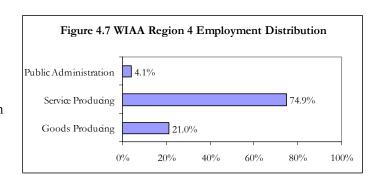


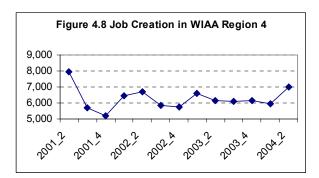
Table 4.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

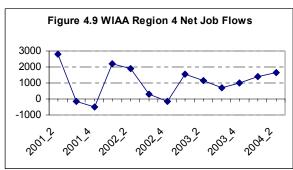
	Total			Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	647	0.61%	20	\$2,717	\$2,095
21 Mining	701	0.66%	19	\$4,335	\$4,148
22 Utilities	2,324	2.18%	14	\$6,248	\$4,312
23 Construction	8,377	7.87%	6	\$2,988	\$2,295
31-33 Manufacturing	12,649	11.88%	2	\$3,056	\$2,300
42 Wholesale Trade	7,246	6.81%	7	\$3,956	\$2,582
44-45 Retail Trade	14,987	14.08%	1	\$1,997	\$1,384
48-49 Transportation and Warehousing	1,574	1.48%	15	\$2,736	\$2,337
51 Information	2,601	2.44%	13	\$3,485	\$2,525
52 Finance and Insurance	7,133	6.70%	8	\$4,388	\$2,800
53 Real Estate and Rental and Leasing	1,399	1.31%	16	\$3,029	\$1,648
54 Professional, Scientific, and Technical Services	5,446	5.11%	9	\$4,069	\$2,836
55 Management of Companies and Enterprises	967	0.91%	17	\$3,863	\$2,508
56 Administrative and Support and Waste					
Management and Remediation Services	4,999	4.70%	10	\$2,255	\$1,622
61 Educational Services	8,863	8.32%	4	\$2,522	\$1,313
62 Health Care and Social Assistance	9,767	9.17%	3	\$2,491	\$1,753
71 Arts, Entertainment, and Recreation	783	0.74%	18	\$1,589	\$1,114
72 Accommodation and Food Services	8,547	8.03%	5	\$1,150	\$827
81 Other Services (except Public Administration)	3,068	2.88%	12	\$2,332	\$1,753
92 Public Administration	4,394	4.13%	11	\$2,479	\$1,531
ALL INDUSTRIES	106,472	100.00%		\$2,850	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## Job Creation and Net Job Flows

On average, 6,273 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 4.8). Quarterly net job flows averaged 1,068 in the same period (Figure 4.9). Net job flows have ranged from a loss of 500 to a gain of about 2,800. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **High-Demand Occupations**

Table 4.7 shows the top 35 of more than 440 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: retail trade; manufacturing; health care and social assistance; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Combined Food Preparation and Serving Workers; Retail Salespersons; Laborers and Freight, Stock, and Material Movers, Hand; and Waiters and Waitresses.

Table 4.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annu	al Average Jo	b Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	315	90	225
Combined Food Preparation and Serving Workers	205	90	115
Retail Salespersons	195	70	125
Laborers and Freight, Stock, and Material Movers, Hand	190	90	100
Waiters and Waitresses	170	65	105
General and Operations Managers	135	70	65
Teacher Assistants**	115	80	35
Stock Clerks and Order Fillers	110	25	85
Office Clerks, General	110	55	55
Elementary School Teachers, Except Special Education**	100	65	35
Sales Representatives, Except Technical and Scientific Products	95	50	45
Truck Drivers, Heavy and Tractor-Trailer	95	60	35
Bookkeeping, Accounting, and Auditing Clerks	90	45	45
Janitors and Cleaners, Except Maids	85	50	35
Registered Nurses	85	55	30
Secretaries, Except Legal, Medical, and Executive	80	35	45
First-Line Supervisors/Managers, Retail Sales	80	40	40
Child Care Workers**	80	45	35
Team Assemblers	70	45	25
Secondary School Teachers, Except Special Education**	70	40	30
Landscaping and Groundskeeping Workers	65	35	30
Meat, Poultry, and Fish Cutters and Trimmers	60	25	35
Maids and Housekeeping Cleaners	60	40	20
Nursing Aides, Orderlies, and Attendants	55	40	15
Cooks, Institution and Cafeteria	55	30	25
Customer Service Representatives	55	35	20
Maintenance and Repair Workers, General	55	35	20
Counter and Rental Clerks	55	25	30
Receptionists and Information Clerks**	50	35	15
First-Line Supervisors/Managers of Office and Administrative Support Workers	50	25	25
Middle School Teachers, Except Special Education**	45	30	15
Bus Drivers, School**	45	30	15
Electricians	45	30	15
Licensed Practical and Licensed Vocational Nurses	45	25	20
Automotive Service Technicians and Mechanics	45	20	25

Note: A minimum of 45 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

85

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

## **Fast-Growing Occupations**

The top 35 of occupations ranked by projected growth of employment are listed in Table 4.8. More than half of these occupations are in education, computer, and health or health support. The top five fast-growing occupations are Computer Software Engineers, Systems Software; Computer Software Engineers, Applications; Preschool Teachers; Choreographers; and Medical Assistants. Seven occupations are both high-demand and fast-growing: Receptionists and Information Clerks; Teacher Assistants; Middle School Teachers; Elementary School Teachers; Secondary School Teachers; Bus Drivers, School; and Child Care Workers. The teaching occupations listed do not include special education.

Table 4.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

8 1	`				
Occupation	Employ 2002	yment 2012	Percent Change	Annual Growth (Percent)	Total Annual Average Job Openings
Computer Software Engineers, Systems Software	***	***	***	***	***
Computer Software Engineers, Applications	130	250	92.3	6.76	15
Preschool Teachers, Except Special Education	300	540	80.0	6.05	30
Choreographers	90	160	77.8	5.92	10
Medical Assistants	120	210	75.0	5.76	10
Veterinary Assistants and Laboratory Animal Caretakers	130	220	69.2	5.40	15
Management Analysts	260	430	65.4	5.16	20
Home Health Aides	370	610	64.9	5.13	30
Computer Support Specialists	300	490	63.3	5.03	25
Directors, Religious Activities and Education	250	400	60.0	4.81	20
Fitness Trainers and Aerobics Instructors	190	300	57.9	4.67	15
Dental Assistants	190	300	57.9	4.67	15
Public Relations Managers	180	280	55.6	4.52	15
Computer Systems Analysts	220	340	54.5	4.45	15
Clergy	460	700	52.2	4.29	35
Personal and Home Care Aides	260	390	50.0	4.14	20
Educational, Vocational, and School Counselors	120	180	50.0	4.14	10
Amusement and Recreation Attendants	100	150	50.0	4.14	10
Vocational Education Teachers, Secondary School	140	210	50.0	4.14	10
Education Administrators, Elementary and Secondary School	220	330	50.0	4.14	15
Kindergarten Teachers, Except Special Education	220	330	50.0	4.14	15
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	410	610	48.8	4.05	25
Receptionists and Information Clerks**	680	1,010	48.5	4.04	50
Teacher Assistants**	1,610	2,390	48.4	4.03	115
Middle School Teachers, Except Special Education**	600	890	48.3	4.02	45
Elementary School Teachers, Except Special Education**	1,310	1,940	48.1	4.00	100
Secondary School Teachers, Except Special Education**	870	1,280	47.1	3.94	70
Special Education Teachers, Preschool, Kindergarten, and Elementary	170	250	47.1	3.93	15
Bus Drivers, School**	600	880	46.7	3.90	45
Pharmacy Technicians	390	570	46.2	3.87	20
Bill and Account Collectors	260	380	46.2	3.87	15
Social and Human Service Assistants	240	350	45.8	3.85	777
Welding, Soldering, and Brazing Machine Setters and Operators	110	160	45.5	3.82	10
Child Care Workers**	1,050	1,520	44.8	3.77	80
Rehabilitation Counselors	90	130	44.4	3.75	5

Note: Selection criterion is annual growth rate of at least 3.75 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

## **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 4.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The selected high-earning occupations are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Five occupations are both high-earning and fast-growing: Computer Software Engineers, Applications; Public Relations Managers; Management Analysts; Computer Systems Analysts; and Education Administrators, Elementary and Secondary School.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 4 currently has a low unemployment rate, but it also has a 47,600-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of 42,100 underemployed and 5,500 unemployed. The region's underemployed workers are willing to commute farther and longer; 48 percent are prepared for 20 or more minutes longer and 41 percent for 20 or more extra miles.

A lack of job opportunities in their areas and low wages at the available jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also mentioned frequently. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could reduce commuter outflow and presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is much better than the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force to meet increasing employment demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will raise labor force participation and may be very effective given the region's low population growth rate.

Table 4.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Anesthesiologists	196,976
Surgeons	180,856
Family and General Practitioners	146,370
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Engineering Managers	96,200
Computer and Information Scientists, Research	90,459
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Aerospace Engineers	84,344
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Computer and Information Systems Managers	81,078
·	
Marketing Managers Computer Hardware Engineers	79,435
1	79,414
Sales Managers Electronics Engineers Export Computer	78,957
Electronics Engineers, Except Computer	78,686
Environmental Engineers	76,960 76,002
Financial Managers	76,003
Materials Engineers	73,382
Medical and Health Services Managers	72,925
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Computer Software Engineers, Applications	71,698
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Computer Programmers	66,789
Physics Teachers, Postsecondary	65,710
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Financial Examiners	63,794
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
First-Line Supervisors/Managers of Non-Retail Sales Workers	63,149
Economists	62,005
Physical Therapists	61,714
Transportation, Storage, and Distribution Managers	61,630
Public Relations Managers	60,944
Broadcast News Analysts	60,944

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 4.10 shows the percentage of selected occupations in WIAA Region 4 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 4.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; and Waiters and Waitresses. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

## **Education and Training Issues**

Educational attainment in WIAA Region 4 is above that of the state. Seventy-seven percent of residents age 25 and over have graduated from high school and 22 percent have bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. Shelby County stands out with 87 percent high school graduates and 37 percent bachelor's or higher degree holders; the other counties have lower educational attainment than the state. Education and skill requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the region.

Table 4.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand jobs do not require postsecondary training, but more than half of fast-growing jobs do. Some form of on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training.

The finding that basic skills are important for all the selected occupations (Table 4.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

Table 4.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills			
Active Learning	34%	57%	68%
Active Listening	77%	83%	84%
Critical Thinking	57%	63%	90%
Learning Strategies	31%	51%	16%
Mathematics	26%	9%	36%
Monitoring	40%	43%	38%
Reading Comprehension	71%	86%	94%
Science	0%	0%	32%
Speaking	69%	83%	74%
Writing	37%	54%	48%
Complex Problem Solving Skills			
Complex Problem Solving	3%	14%	36%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	3%	0%	4%
Management of Personnel Resources	9%	3%	18%
Time Management	46%	60%	50%
Social Skills			
Coordination	26%	29%	30%
Instructing	34%	60%	28%
Negotiation	6%	3%	14%
Persuasion	6%	3%	14%
Service Orientation	34%	43%	14%
Social Perceptiveness	49%	69%	16%
Systems Skills			
Judgment and Decision Making	14%	17%	64%
Systems Analysis	0%	9%	10%
Systems Evaluation	3%	3%	16%
Technical Skills	4.407	007	007
Equipment Maintenance	14%	9%	0%
Equipment Selection	14%	6%	6%
Installation	11%	3%	0%
Operation and Control	9%	3%	4%
Operation Monitoring	9%	6%	2%
Operations Analysis	0%	9%	18%
Programming	0%	6%	6%
Quality Control Analysis	3%	3%	4%
Repairing	11%	3%	0%
Technology Design	0%	6%	8%
Troubleshooting	11%	14%	10%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

Table 4.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		1	10
Doctoral Degree			4
Master's Degree		2	3
Work Experience Plus a Bachelor's or Higher Degree	1	4	15
Bachelor's Degree	3	9	15
Associate Degree	1	1	
Postsecondary Vocational Training	2	2	
Work Experience in a Related Occupation	2	1	2
Long-term On-the-job Training	1	1	
Moderate On-the-job Training	8	5	1
Short-term On-the-job Training	17	9	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills for a region that has a large number of low wage jobs is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 4 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

**Walker County.** Short-term certificate programs that provide technical skills will certainly be the answer to providing a skilled workforce. Keeping the training current with demand will also help the workforce stay on top.

Shelby County. There continues to be a need in Shelby County to enhance employee skills related

to work ethic, attitude, team work, and literacy. Programs should be implemented to train workers that are moving into positions recently vacated by employees transferring to higher paying positions in the automotive sector. There should also be emphasis on identifying those workers that are underemployed (working in jobs below their skill level) so they can advance into better jobs.

**St. Clair County.** We are contacting guidance counselors and principals at our schools and business and industry.

**Chilton County.** Working with the Board of Education in offering Career Day for our high school seniors. Working with high school counselors and principals and working closely with HR officers in existing industries.

Action issue 2. How can/should worker skills be generally upgraded in the region?

Walker County. Community colleges are in position to provide the much needed certificate programs and this type of training will be the key to workforce enhancement. However, funding for these programs must be provided to get targeted groups back into the labor force. Recruitment will be important as well and long-term mentoring may also be necessary to maintain the steady flow of students. Career Center programs such as workshops that teach job obtainment and retention skills will be important. Career Centers will also be in position to recruit and provide information, access, and connections to the jobs and the training.

**Shelby County.** There should be programs in place to focus on basic manufacturing skills (i.e. forklift operations, blueprint reading, and plant safety). There is also a focus on training for fabrication and assembly and industrial maintenance. Institutions such as schools of technology, skills centers, and community colleges should work together with new and expanding industries to coordinate training programs required by existing employers.

St. Clair County. More training and better facilities.

Chilton County. Working with local educators to get more students into technical school.

Action issue 3. How can future workers be helped to make better choices about career preparation?

**Walker County.** Career exploration opportunities for high school students will be important and should include representatives of the automotive industry and the science/technology fields. Focus on math and science subjects in K-12 to meet the increasing need for workers in these fields. In addition, Summer Technology camps and field trips to industry as well as career/technical programs help enhance interest in business/industrial careers.

**Shelby County.** There should be a more effective linkage between existing employers and training programs. By enhancing this relationship, the companies can clearly identify those jobs facing critical shortages and influence the educational system in responding to those needs. Enhancement of internships, job shadowing, etc. will also encourage the linkage between existing employers and training/education institutions.

St. Clair County. Visiting schools, civic organizations, and giving good public relations.

**Chilton County.** By visiting schools, civic organizations, and making people aware of the preparation needed for a local work force.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Walker County. Yes

**Shelby County.** Yes

**St. Clair County.** Yes. There should be more awareness of the demand for workers in the schools and organizations.

**Chilton County.** Yes. Local schools and organizations should be made more aware of opportunities in the local work force.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

Walker County. Employers should have significant input into the Career/Tech programs in order to have their needs met. Industry recruiters should have a direct link to school systems and have access to students. Partner agencies such as the Employment Service and CareerLink can assist in career exploration activities and provide occupation statistics and data, as well as interacting with employers to determine needs.

WorkKeys—a component of the ACT System—and KeyTrain®—a WorkKeys approved training system—have and will play a major role in the development of a more skilled workforce.

**Shelby County.** Employers—There should be more interaction between employers and local training/educational institutions to share information about employment needs.

<u>Elected Officials</u>—They should be familiar with training programs within their jurisdiction and provide assistance to coordinate employers and training opportunities.

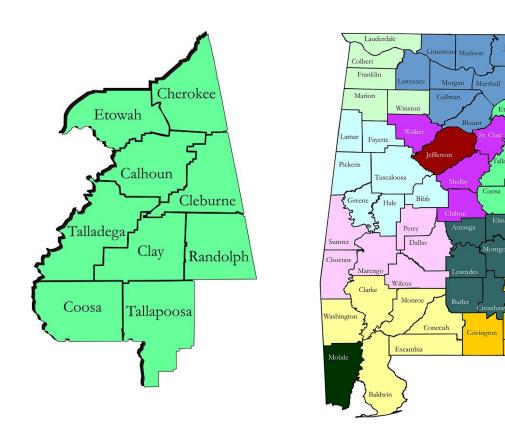
**St. Clair County.** We have facilities and instructors to train. There needs to be more communication between schools, elected officials, and businesses.

**Chilton County.** There needs to be more communication between elected officials, businesses, and employers.

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# **WIAA Region 5 Workforce Report**

De Kalb



# Summary

- Region 5 had a 4.4 percent unemployment rate in August 2005, with about 8,700 unemployed. However, the nine-county region has a 53,400-strong available labor pool that is looking for better jobs and includes 44,700 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 57 percent are prepared for 20 or more minutes longer and 44 percent will go 20 or more extra miles.
- In 2000, about 31,400 residents commuted out of the region for work, compared to 10,200 incommuters. All nine counties had net commuter outflow. About 30 percent of the commuter outflow was into Georgia. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is lower than for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 71 percent and 13 percent, respectively, for the region. Educational attainment for all counties in the region is below the state level.

- Employment is currently growing faster than the labor force. While this might reduce commuter outflow, it also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting. Population growth in the region is lagging that for the state. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing, health care and social
  assistance, retail trade, educational services, and accommodation and food services. These five
  industries provided 97,870 jobs, 69 percent of the region total in the second quarter of 2004. Of
  these leading employers, only manufacturing had higher average monthly wages than the \$2,405
  regional average.
- On average about 7,500 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 737. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Six occupations are both high-demand and fast-growing: Counter and Rental Clerks; Cabinetmakers and Bench Carpenters; Registered Nurses; Construction Laborers; Combined Food Preparation and Serving Workers; and Nursing Aides, Orderlies, and Attendants. The top five high-demand occupations are Cashiers; Combined Food Preparation and Serving Workers; Retail Salespersons; Waiters and Waitresses; and Office Clerks, General. The top five fast-growing occupations are Medical Assistants; Telecommunications Line Installers and Repairers; Home Health Aide; Emergency Medical Technicians and Paramedics; and Painters, Transportation Equipment.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Seven of the top 10 are health occupations. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 39 selected high-demand, 36 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Six occupations are both high-earning and fast-growing: Pharmacists; Sales Managers; Mechanical Engineers; Education Administrators, Postsecondary; Management Analysts; and Industrial Engineers.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

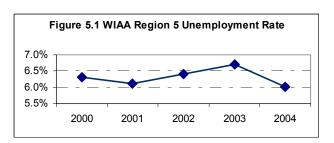
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This strongly emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## **Workforce Supply**

## **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 5.1 shows labor force information for Region 5 and its nine counties for 2004 and August 2005. Rising numbers of employed residents relative to labor force size lowered unemployment in 2005 for the region and its counties. Randolph County is the only one with shrinking number of employed and labor force.

Unemployment rates in 2004 ranged between 4.7 percent and 7.1 percent for the counties, with 6.0 percent for the region. In August 2005, the unemployment range was 3.7 percent to 7.4 percent, with a 4.4 percent rate for the region. Annual unemployment rates for 2000 to 2004 are shown in Figure 5.1. The region's unemployment dropped to 6.1 percent in 2001, rose to 6.7 percent in 2003, and has been declining since. Employment in the region averaged 141,750 quarterly from



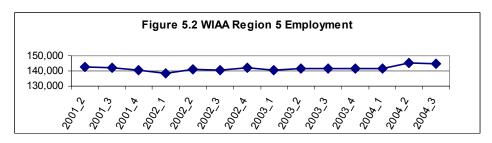
Source: Alabama Department of Industrial Relations.

the second quarter of 2001 to third quarter 2004 (Figure 5.2). Employment, which refers to the number of full-time and part-time jobs, has been steadily rising with increasing economic activity.

Table 5.1 WIAA Region 5 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Calhoun	54,324	51,393	2,931	5.40%
Cherokee	12,135	11,571	564	4.65%
Clay	5,910	5,540	370	6.26%
Cleburne	6,726	6,379	347	5.16%
Coosa	5,017	4,661	356	7.10%
Etowah	47,268	44,291	2,977	6.30%
Randolph	10,099	9,438	661	6.55%
Talladega	39,214	36,592	2,622	6.69%
Tallapoosa	18,438	17,306	1,132	6.14%
WIAA Region 5	199,131	187,171	11,960	6.01%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Calhoun	53,780	F4 F 4	2.21.6	
O1 1		51,564	2,216	4.12%
Cherokee	12,179	51,564 11,697	2,216 482	
Cherokee Clay				3.96%
	12,179	11,697	482	4.12% 3.96% 4.96% 3.71%
Clay	12,179 5,912	11,697 5,619	482 293	3.96% 4.96%
Clay Cleburne	12,179 5,912 6,637	11,697 5,619 6,391	482 293 246	3.96% 4.96% 3.71% 4.26%
Clay Cleburne Coosa	12,179 5,912 6,637 5,022	11,697 5,619 6,391 4,808	482 293 246 214	3.96% 4.96% 3.71%
Clay Cleburne Coosa Etowah	12,179 5,912 6,637 5,022 46,764	11,697 5,619 6,391 4,808 44,752	482 293 246 214 2,012	3.96% 4.96% 3.71% 4.26% 4.30%
Clay Cleburne Coosa Etowah Randolph	12,179 5,912 6,637 5,022 46,764 9,532	11,697 5,619 6,391 4,808 44,752 8,830	482 293 246 214 2,012 702	3.96% 4.96% 3.71% 4.26% 4.30% 7.36% 4.45%
Clay Cleburne Coosa Etowah Randolph Talladega	12,179 5,912 6,637 5,022 46,764 9,532 39,579	11,697 5,619 6,391 4,808 44,752 8,830 37,818	482 293 246 214 2,012 702 1,761	3.96% 4.96% 3.71% 4.26% 4.30% 7.36%
Clay Cleburne Coosa Etowah Randolph Talladega Tallapoosa	12,179 5,912 6,637 5,022 46,764 9,532 39,579 18,593	11,697 5,619 6,391 4,808 44,752 8,830 37,818 17,848	482 293 246 214 2,012 702 1,761 745	3.96% 4.96% 3.71% 4.26% 4.30% 7.36% 4.45% 4.01%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **Commuting Patterns**

In 2000, almost 21,200 more people commuted out of the region for work than commuted in (Table 5.2). There was significant commuting within the region as well. About 30 percent of the commuter outflow was into Georgia. All nine counties had net commuter outflow.

Table 5.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 59 percent of resident workers; between 20 and 40 minutes for 25 percent; and more than 40 minutes for 11 percent. About 3 percent of workers take more than an hour.

The commute is less than 10 miles for 44 percent of workers and roughly 31 percent travel 10 to 25 miles. About 18 percent of workers travel more than 25 miles one-way, with nearly 6 percent exceeding 45 miles. This commuting data suggest that roads

**Table 5.2 WIAA Region 5 Commuting Patterns** 

Area	Inflow,	2000		Outflow	, 2000	
	Number	Percent		Number	Percent	
Calhoun	1,778	17.4		3,115	9.9	
Cherokee	344	3.4		4,131	13.2	
Clay	117	1.1		301	1.0	
Cleburne	53	0.5		2,374	7.6	
Coosa	141	1.4		618	2.0	
Etowah	3,723	36.4		8,537	27.2	
Randolph	750	7.3		2,953	9.4	
Talladega	1,894	18.5		5,227	16.7	
Tallapoosa	1,421	13.9		4,127	13.2	
WIAA Region 5	10,221	100.0		31,383	100.0	
Average commute Less	e time (one-v	• /		Percent of	.1	
20 to	40 minutes			25.2		
	inutes to an h			7.8		
More	e than an hou	:		3.	.2	
Average commut	e distance (o	ne-way), 2	004	Percent of	f workers	
Less	than 10 miles			44.4		
10 to	25 miles			31.3		
25 to	45 miles			12.5		

Note: Rounding errors may be present.

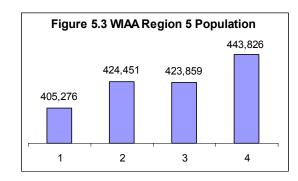
More than 45 miles

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

#### **Population**

The Region 5 population estimate of 423,859 for 2004 is 0.1 percent less than was recorded for 2000 (Figure 5.3 and Table 5.3). The population shrank in four counties. The region's population is projected to grow 4.6 percent in this decade to about 443,800 by 2010. Population will grow fastest in Cherokee County and slowest in Calhoun County. Faster employment growth will reduce commuter outflow and place less of a burden on the region's roads. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents.



5.9

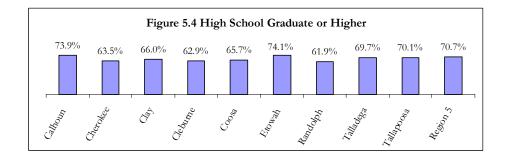
Table 5.3 WIAA Region 5 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Calhoun	116,034	112,249	112,425	0.2	112,184	-0.1
Cherokee	19,543	23,988	24,525	2.2	28,320	18.1
Clay	13,252	14,254	14,092	-1.1	15,277	7.2
Cleburne	12,730	14,123	14,458	2.4	15,409	9.1
Coosa	11,063	12,202	11,368	-6.8	13,127	7.6
Etowah	99,840	103,459	103,250	-0.2	105,907	2.4
Randolph	19,881	22,380	22,603	1.0	24,819	10.9
Talladega	74,107	80,321	80,277	-0.1	85,524	6.5
Tallapoosa	38,826	41,475	40,861	-1.5	43,259	4.3
WIAA Region 5	405,276	424,451	423,859	-0.1	443,826	4.6
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 5 residents who are 25 years old and over is shown below in Table 5.4 and Figures 5.4 and 5.5. Nearly 71 percent graduated from high school and 13 percent hold a bachelor's or higher degree. Educational attainment for all counties in the region is below the state level. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



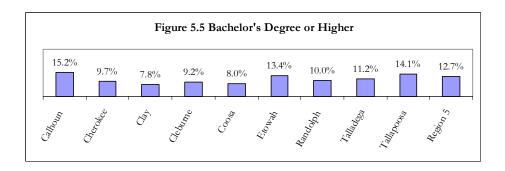


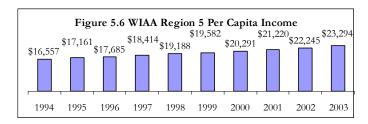
Table 5.4 Educational Attainment in 2000, Population 25 Years and Over

	Calhoun	Cherokee	Clay	Cleburne	Coosa
Total	74,015	16,825	9,767	9,533	8,255
No schooling completed	734	372	125	159	180
Nursery to 4th grade	438	176	36	127	63
5th and 6th grade	1,465	559	315	293	203
7th and 8th grade	3,521	1,215	721	663	398
9th grade	3,474	1,019	616	656	513
10th grade	3,795	1,105	611	816	593
11th grade	3,279	896	450	424	481
12th grade, no diploma	2,612	796	448	398	400
High school graduate/equivalent	23,856	5,865	3,690	3,417	3,164
Some college, less than 1yr	4,794	960	544	411	414
Some college, 1+ yrs, no degree	11,017	1,517	977	965	821
Associate degree	3,765	709	471	325	362
Bachelor's degree	6,612	928	486	463	428
Master's degree	3,332	537	219	344	174
Professional school degree	828	151	43	57	41
Doctorate degree	493	20	15	15	20
	Etowah	Randolph	Talladega	Tallapoosa	Region 5
Total	69,829	14,762	53,060	28,373	284,419
No schooling completed	743	218	693	320	3,544
Nursery to 4th grade		216		2.1	
	432	246	442	264	2,224
5th and 6th grade	432 1,554	246 564	442 1,287	264 772	2,224 7,012
5th and 6th grade 7th and 8th grade					
V .	1,554	564	1,287	772	7,012
7th and 8th grade	1,554 3,294	564 981	1,287 2,886	772 1,373	7,012 15,052
7th and 8th grade 9th grade	1,554 3,294 2,978	564 981 971	1,287 2,886 2,658	772 1,373 1,369	7,012 15,052 14,254
7th and 8th grade 9th grade 10th grade	1,554 3,294 2,978 3,532	564 981 971 1,061	1,287 2,886 2,658 3,149	772 1,373 1,369 1,667	7,012 15,052 14,254 16,329
7th and 8th grade 9th grade 10th grade 11th grade	1,554 3,294 2,978 3,532 3,098	564 981 971 1,061 844	1,287 2,886 2,658 3,149 2,707	772 1,373 1,369 1,667 1,510	7,012 15,052 14,254 16,329 13,689
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma	1,554 3,294 2,978 3,532 3,098 2,484	564 981 971 1,061 844 733	1,287 2,886 2,658 3,149 2,707 2,280	772 1,373 1,369 1,667 1,510 1,214	7,012 15,052 14,254 16,329 13,689 11,365
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma High school graduate/equivalent	1,554 3,294 2,978 3,532 3,098 2,484 22,531	564 981 971 1,061 844 733 4,723	1,287 2,886 2,658 3,149 2,707 2,280 18,270	1,373 1,369 1,667 1,510 1,214	7,012 15,052 14,254 16,329 13,689 11,365 94,864
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma High school graduate/equivalent Some college, less than 1yr	1,554 3,294 2,978 3,532 3,098 2,484 22,531 4,651	564 981 971 1,061 844 733 4,723 852	1,287 2,886 2,658 3,149 2,707 2,280 18,270 3,491	1,373 1,369 1,667 1,510 1,214 9,348 1,808	7,012 15,052 14,254 16,329 13,689 11,365 94,864 17,925
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma High school graduate/equivalent Some college, less than 1yr Some college, 1+ yrs, no degree	1,554 3,294 2,978 3,532 3,098 2,484 22,531 4,651 10,486	564 981 971 1,061 844 733 4,723 852 1,484	1,287 2,886 2,658 3,149 2,707 2,280 18,270 3,491 6,892	772 1,373 1,369 1,667 1,510 1,214 9,348 1,808 3,427	7,012 15,052 14,254 16,329 13,689 11,365 94,864 17,925 37,586
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma High school graduate/equivalent Some college, less than 1yr Some college, 1+ yrs, no degree Associate degree	1,554 3,294 2,978 3,532 3,098 2,484 22,531 4,651 10,486 4,674	564 981 971 1,061 844 733 4,723 852 1,484 606	1,287 2,886 2,658 3,149 2,707 2,280 18,270 3,491 6,892 2,354	772 1,373 1,369 1,667 1,510 1,214 9,348 1,808 3,427 1,289	7,012 15,052 14,254 16,329 13,689 11,365 94,864 17,925 37,586 14,555
7th and 8th grade 9th grade 10th grade 11th grade 12th grade, no diploma High school graduate/equivalent Some college, less than 1yr Some college, 1+ yrs, no degree Associate degree Bachelor's degree	1,554 3,294 2,978 3,532 3,098 2,484 22,531 4,651 10,486 4,674 5,679	564 981 971 1,061 844 733 4,723 852 1,484 606 919	1,287 2,886 2,658 3,149 2,707 2,280 18,270 3,491 6,892 2,354 3,663	772 1,373 1,369 1,667 1,510 1,214 9,348 1,808 3,427 1,289 2,679	7,012 15,052 14,254 16,329 13,689 11,365 94,864 17,925 37,586 14,555 21,857

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### Per Capita Income

Per capita income (PCI) in Region 5 was at \$23,294 in 2003 (Figure 5.6), 41 percent higher than in 1994, and about \$3,200 or 12 percent less than the Alabama average of \$26,505. Calhoun County had the highest PCI with \$24,492 and Randolph had the lowest with \$19,645. All nine counties' PCIs were below the state average.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

#### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 5 had an underemployment rate of 23.6 percent in 2004. Applying this rate to August 2005 labor force data means that about 44,700 employed residents were underemployed (Table 5.5). Adding the unemployed gives a total available labor pool of 53,352 for the region. This pool is more than six times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 15.5 percent for Cherokee County to 28.9 percent for Etowah County. Calhoun County has the largest available labor in the region and Cleburne County has the smallest.

Table 5.5 Available Labor in WIAA Region 5

	Region 5	<u>Calhoun</u>	<u>Cherokee</u>	<u>Clay</u>	<u>Cleburne</u>
Labor Force	197,998	53,780	12,179	5,912	6,637
Employed	189,327	51,564	11,697	5,619	6,391
Underemployment rate	23.60%	27.40%	15.50%	24.60%	21.70%
Underemployed workers	44,681	14,129	1,813	1,382	1,387
Unemployed	8,671	2,216	482	293	246
Available labor pool	53,352	16,345	2,295	1,675	1,633
	<u>Coosa</u>	<u>Etowah</u>	<u>Randolph</u>	<u>Talladega</u>	<u>Tallapoosa</u>
Labor Force	5,022	46,764	9,532	39,579	18,593
Employed	4,808	44,752	8,830	37,818	17,848
Underemployment rate	28.80%	28.90%	22.90%	15.90%	26.30%
Underemployed workers	1,385	12,933	2,022	6,013	4,694
Unemployed	214	2,012	702	1,761	745
Available labor pool	1,599	14,945	2,724	7,774	5,439

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

#### **Industry Mix**

The manufacturing sector was the leading employer with roughly 36,100 jobs in the second quarter of 2004 (Table 5.6). Rounding up the top five industries by employment are health care and social assistance; retail trade; educational services; and accommodation and food services. These five industries provided 97,869 jobs, 69 percent of the region total. The average monthly wage across all industries in the region was \$2,405. Of the leading employers, only manufacturing paid more than this average. The highest average monthly wages were for mining (\$4,394), utilities (\$3,668), and information (\$3,101). Accommodation and food services paid the least at \$1,047. Mining also had the highest average monthly new hire wages with \$3,650, followed by management of companies and enterprises with \$2,490. Accommodation and food services paid the least average monthly new hire wages with \$737.

By broad industry classification, service producing industries provided about 65 percent of all covered jobs in the region in second quarter 2004 (Figure 5.7). Goods producing industries were next with 30 percent and public administration 5 percent.

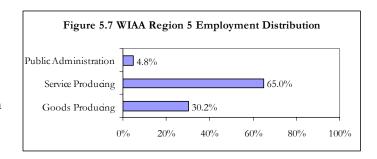


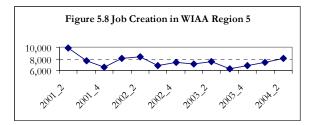
Table 5.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

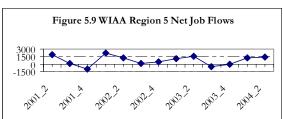
				Average	Average
Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Monthly Wage	Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	829	0.58%	18	\$2,064	\$1,692
21 Mining	612	0.43%	19	\$4,394	\$3,650
22 Utilities	1,210	0.85%	16	\$3,668	\$2,364
23 Construction	5,413	3.80%	8	\$2,519	\$2,169
31-33 Manufacturing	36,111	25.35%	1	\$3,015	\$2,277
42 Wholesale Trade	5,165	3.63%	9	\$3,016	\$2,227
44-45 Retail Trade	18,573	13.04%	3	\$1,784	\$1,157
48-49 Transportation and Warehousing	3,245	2.28%	12	\$2,642	\$2,160
51 Information	2,030	1.43%	14	\$3,101	\$1,787
52 Finance and Insurance	3,272	2.30%	11	\$2,869	\$2,030
53 Real Estate and Rental and Leasing	1,429	1.00%	15	\$2,078	\$1,394
54 Professional, Scientific, and Technical Services	3,371	2.37%	10	\$3,021	\$2,071
55 Management of Companies and Enterprises	307	0.22%	20	\$2,763	\$2,490
56 Administrative and Support and Waste					
Management and Remediation Services	6,856	4.81%	6	\$1,909	\$1,345
61 Educational Services	12,860	9.03%	4	\$2,370	\$1,456
62 Health Care and Social Assistance	19,279	13.54%	2	\$2,386	\$1,727
71 Arts, Entertainment, and Recreation	1,023	0.72%	17	\$1,644	\$1,105
72 Accommodation and Food Services	11,046	7.76%	5	\$1,047	\$737
81 Other Services (except Public Administration)	2,983	2.09%	13	\$1,884	\$1,374
92 Public Administration	6,821	4.79%	7	\$2,324	\$1,546
ALL INDUSTRIES	142,435	100.00%		\$2,405	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## Job Creation and Net Job Flows

On average, 7,514 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 5.8). Quarterly net job flows averaged 737 in the same period (Figure 5.9). Net job flows have ranged from a loss of 1,000 to a gain of about 2,200. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table 5.7 shows the top 39 of more than 500 occupations ranked by projected demand for jobs. Many of these occupations are common to the top five employment sectors identified earlier: manufacturing; health care and social assistance; retail trade; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Combined Food Preparation and Serving Workers; Retail Salespersons; Waiters and Waitresses; and Office Clerks, General.

Table 5.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annu	al Average Jo	b Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	315	55	260
Combined Food Preparation and Serving Workers**	220	65	155
Retail Salespersons	200	45	155
Waiters and Waitresses	160	25	135
Office Clerks, General	105	30	75
Registered Nurses**	105	55	50
General and Operations Managers	105	35	70
Truck Drivers, Heavy and Tractor-Trailer	90	45	45
Teacher Assistants	85	40	45
Elementary School Teachers, Except Special Education	80	35	45
First-Line Supervisors/Managers, Retail Sales	70	30	40
Janitors and Cleaners, Except Maids	70	25	45
Nursing Aides, Orderlies, and Attendants**	65	35	30
Bookkeeping, Accounting, and Auditing Clerks	60	15	45
Child Care Workers	60	20	40
Maintenance and Repair Workers, General	60	25	35
Secretaries, Except Legal, Medical, and Executive	60	5	55
Landscaping and Groundskeeping Workers	55	20	35
Secondary School Teachers, Except Special Education	55	20	35
Cabinetmakers and Bench Carpenters**	50	25	25
Sales Representatives, Except Technical and Scientific Products	50	20	30
Maids and Housekeeping Cleaners	50	25	25
Meat, Poultry, and Fish Cutters and Trimmers	***	***	***
First-Line Supervisors/Managers of Production and Operating Workers	45	15	30
Cooks, Institution and Cafeteria	45	15	30
Customer Service Representatives	40	20	20
Welders, Cutters, Solderers, and Brazers	40	15	25
Automotive Service Technicians and Mechanics	40	10	30
Farm, Ranch, and Other Agricultural Managers	40	0	40
Packers and Packagers, Hand	40	15	25
First-Line Supervisors/Managers of Office and Administrative Support Workers	40	10	30
Licensed Practical and Licensed Vocational Nurses	40	15	25
Construction Laborers**	40	25	15
Tellers	40	10	30
Middle School Teachers, Except Special Education	35	15	20
Hairdressers, Hairstylists, and Cosmetologists	35	10	25
Carpenters	35	15	20
Security Guards	35	15	20
Counter and Rental Clerks**	35	15	20

Note: A minimum of 35 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

#### **Fast-Growing Occupations**

The top 36 of occupations ranked by projected growth of employment are listed in Table 5.8. A third of these occupations are in education and health or health support. The top five fast-growing occupations are Medical Assistants; Telecommunications Line Installers and Repairers; Home Health Aide; Emergency Medical Technicians & Paramedics; and Painters, Transportation Equipment. Six occupations are both high-demand and fast-growing: Counter and Rental Clerks; Cabinetmakers and Bench Carpenters; Registered Nurses; Construction Laborers; Combined Food Preparation and Serving Workers; and Nursing Aides, Orderlies, and Attendants.

Table 5.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Employ	yment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Medical Assistants	250	380	52.0	4.28	20
Telecommunications Line Installers and Repairers	370	520	40.5	3.46	25
Home Health Aides	430	590	37.2	3.21	20
Emergency Medical Technicians and Paramedics	260	350	34.6	3.02	15
Painters, Transportation Equipment	120	160	33.3	2.92	10
Welding, Solderers, and Brazers Machine Setters and Operators	120	160	33.3	2.92	10
Pharmacists	310	410	32.3	2.84	15
Dental Assistants	190	250	31.6	2.78	10
Social and Human Service Assistants	340	440	29.4	2.61	15
Telecommunications Equipment Installers	210	270	28.6	2.54	10
Counter and Rental Clerks**	500	640	28.0	2.50	35
Industrial Engineers	150	190	26.7	2.39	10
Public Relations Managers	150	190	26.7	2.39	10
Directors, Religious Activities and Education	230	290	26.1	2.35	10
Pharmacy Technicians	310	390	25.8	2.32	15
Cabinetmakers and Bench Carpenters**	930	1,170	25.8	2.32	50
Sales Managers	240	300	25.0	2.26	10
Preschool Teachers, Except Special Education	410	510	24.4	2.21	15
Receptionists and Information Clerks	710	880	23.9	2.17	30
Personal and Home Care Aides	210	260	23.8	2.16	10
Legal Secretaries	170	210	23.5	2.14	10
Training and Development Specialists	170	210	23.5	2.14	10
Cost Estimators	130	160	23.1	2.10	10
Registered Nurses**	2,470	3,040	23.1	2.10	105
Special Education Teachers, Secondary School	130	160	23.1	2.10	10
Vocational Education Teachers, Secondary School	180	220	22.2	2.03	10
Vocational Education Teachers, Postsecondary	180	220	22.2	2.03	10
Construction Laborers**	1,090	1,330	22.0	2.01	40
Management Analysts	230	280	21.7	1.99	10
Combined Food Preparation and Serving Workers**	3,050	3,710	21.6	1.98	220
Nursing Aides, Orderlies, and Attendants**	1,670	2,030	21.6	1.97	65
Cement Masons and Concrete Finishers	140	170	21.4	1.96	10
Education Administrators, Postsecondary	140	170	21.4	1.96	10
Advertising Sales Agents	190	230	21.1	1.93	10
Mechanical Engineers	240	290	20.8	1.91	10
Kindergarten Teachers, Except Special Education	290	350	20.7	1.90	10

Note: Selection criterion is annual growth rate of at least 1.9 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

#### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 5.9 shows 50 selected highest earning occupations in the region. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. The selected high-earning occupations are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Six occupations are both high-earning and fast-growing: Pharmacists; Mechanical Engineers; Industrial Engineers; Sales Managers; Management Analysts; and Education Administrators, Postsecondary.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 5 currently has a low unemployment rate, but it also has a 53,350-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes 44,700 underemployed workers. The region's underemployed workers are willing to commute farther and longer; 57 percent are prepared for 20 or more minutes longer and 44 percent for 20 or more extra miles.

A lack of job opportunities in their areas and low wages at the available jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also mentioned. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could reduce commuter outflow and presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is below the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force to meet increasing employment demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will raise labor force participation and may be very effective given the region's low population growth rate.

Table 5.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Anesthesiologists	196,976
Surgeons	180,856
Obstetricians and Gynecologists	176,010
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
Physicists	93,974
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Aerospace Engineers	84,344
Mathematicians	83,366
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	
Sales Managers	79,435 78,957
Electronics Engineers, Except Computer	
Securities, Commodities, and Financial Services Sales Agents	78,686
	78,458
Environmental Engineers  Envirol Manager	76,960
Financial Managers	76,003
Materials Engineers	73,382
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Financial Examiners	63,794
Architects, Except Landscape and Naval	63,627
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Skills

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 5.10 shows the percentage of selected occupations in WIAA Region 5 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 5.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected highdemand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; and Waiters and Waitresses. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in WIAA Region 5 is below that of the state. Seventy-one percent of residents age 25 and over have graduated from high school and 13 percent have bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. All the region's nine counties have lower educational attainment than the state. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 5.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand jobs do not require postsecondary training. A third of fast-growing jobs require a bachelor's or higher degree. Some form of on-the-job training is the minimum requirement for most high-demand occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training.

The finding that basic skills are important for all the selected occupations (Table 5.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

Table 5.10 Share of Selected Occupations for Which Skill Is Primary

	Selected	Selected	Selected
	High-Demand	Fast-Growing	High-Earning
	Occupations	Occupations	Occupations
Basic Skills	-		
Active Learning	31%	44%	70%
Active Listening	72%	86%	86%
Critical Thinking	59%	58%	94%
Learning Strategies	31%	31%	14%
Mathematics	31%	33%	36%
Monitoring	38%	31%	36%
Reading Comprehension	67%	78%	96%
Science	3%	6%	36%
Speaking	67%	83%	70%
Writing	33%	58%	44%
Complex Problem Solving Skills			
Complex Problem Solving	3%	11%	42%
Resource Management Skills			
Management of Financial Resources	5%	0%	16%
Management of Material Resources	5%	0%	2%
Management of Personnel Resources	13%	6%	16%
Time Management	46%	64%	50%
Social Skills			
Coordination	31%	28%	32%
Instructing	31%	44%	18%
Negotiation	8%	3%	18%
Persuasion	5%	6%	16%
Service Orientation	31%	42%	14%
Social Perceptiveness	46%	53%	14%
Systems Skills			
Judgment and Decision Making	21%	19%	72%
Systems Analysis	0%	3%	12%
Systems Evaluation	0%	3%	22%
Technical Skills			
Equipment Maintenance	13%	11%	0%
Equipment Selection	21%	19%	8%
Installation	13%	6%	0%
Operation and Control	10%	8%	4%
Operation Monitoring	8%	0%	2%
Operations Analysis	3%	6%	20%
Programming	0%	0%	4%
Quality Control Analysis	5%	3%	2%
Repairing	13%	3%	0%
Technology Design	0%	0%	8%
Troubleshooting	8%	3%	10%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

Table 5.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		1	12
Doctoral Degree			2
Master's Degree			3
Work Experience Plus a Bachelor's or Higher Degree	2	5	13
Bachelor's Degree	3	6	18
Associate Degree	1	1	
Postsecondary Vocational Training	3	3	
Work Experience in a Related Occupation	3	2	1
Long-term On-the-job Training	3	3	
Moderate On-the-job Training	8	9	1
Short-term On-the-job Training	16	6	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills for a region that has a large number of low wage jobs is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

#### Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the August 2005 Annual Report of the Region 5 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

The shortage of a trained workforce can be attributed to several circumstances:

- Layoffs by the telephone industry in the technical field over the last few years have deterred students from entering technical fields.
- Electronics is a difficult field of study, one that requires special skills and abilities. This limits the number of students that will enroll in this curriculum under any circumstances.
- Jobs in the manufacturing sector carry the stigma of being dirty, sweaty, dead-end jobs.

 Students are strongly pressured by family and our culture to pursue, at minimum, a four-year degree.

In response to the above, several actions are suggested:

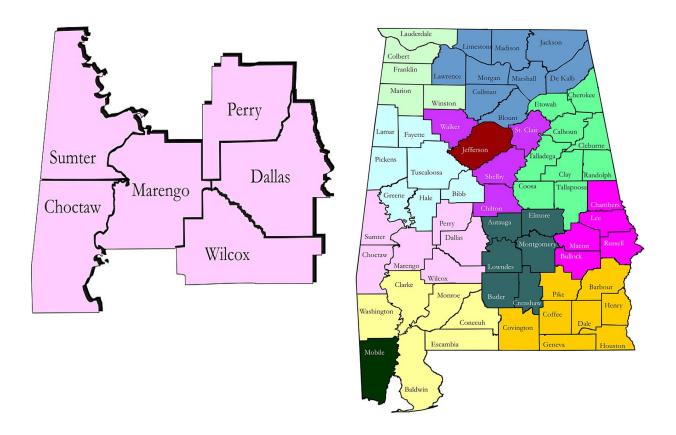
## At the high school level

- Increase awareness of technical careers to the high schools and the middle schools (have representatives from the career technical programs visit high school students and counselors.
- Promote the high school dual enrollment and Early College Options programs for technical careers.
- Increase awareness of the alternatives to four-year degrees.
- Promote the advantages of technical careers (to students, counselors, and parents):
  - o Good salaries and benefits
  - o Numerous job opportunities
  - o No longer a dirty sweaty job
  - o Opportunities for advancement
- Plant tours
- Career days
- Offer scholarships
- Co-op/shadowing programs

## General workforce strategies

- Recruit employees from areas with high unemployment.
- Local TV programming—"spotlight" one industry a month to educate the public on the advantages of technical careers.
- Utilize the services of Alabama Industrial Development Training and the Career Centers to train workers to replace those lost to the automotive industry.
- Offer tax incentives to firms that train employees.
- Encourage industry to invest in workforce development and collaborate with education sectors to develop programs.
- Overall, increase pre-service and in-service training. Increase worker assessment and credentialing.

# WIAA Region 6 Workforce Report



# **Summary**

- Region 6 had a 7.9 percent unemployment rate in August 2005, with about 3,400 unemployed. However, the six-county region has a 14,500-strong available labor pool that is looking for better jobs and includes 11,100 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 61 percent are prepared for 20 or more minutes longer and 55 percent will go 20 or more extra miles.
- In 2000, about 7,200 residents commuted out of the region for work, compared to 6,200 incommuters. Dallas, Marengo, and Wilcox counties had net commuter inflow. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is lower than for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 67 percent and 12 percent, respectively, for the region. Educational attainment for all counties in the region is below the state level.

- Employment is declining, but at a slower rate than the labor force as the region's population declines. More jobs might reduce commuter outflow, but also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing; health care and social assistance; educational services; retail trade; and public administration. These five industries provided 24,536 jobs, 69 percent of the region total in the second quarter of 2004. Two of these leading employers, manufacturing and educational services, had higher average monthly wages than the \$2,312 regional average.
- On average about 2,000 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 52. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- No occupation is both high-demand and fast-growing. The top five high-demand occupations are Combined Food Preparation and Serving Workers; General and Operations Managers; Food Batchmakers; Registered Nurses; and Truck Drivers, Heavy and Tractor-Trailer. The top five fast-growing occupations are Parking Lot Attendants; Painters, Transportation Equipment; Network Systems and Data Communications Analysts; Multiple Machine Tool Setters, Operators and Tenders, Metal and Plastic; and Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Of the top 10 high-earning occupations, four are in health and three are in management. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 14 selected high-demand, 11 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. One occupation, Network Systems and Data Communications Analysts, is both high-earning and fast-growing.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This strongly emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Workforce Supply

## **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 6.1 shows labor force information for Region 6 and its six counties for 2004 and August 2005. Smaller declines in the number of employed residents than in labor force size lowered unemployment in 2005 for the region and its counties. Marengo and Sumter counties had slightly more employed residents.

Unemployment rates in 2004 ranged between 6.2 percent and 12 percent for the counties, with 9.2 percent for the region. In August 2005, the unemployment range was 5.5 percent to 9.7 percent, with a 7.9 percent rate for the region. Annual unemployment rates for 2000 to 2004 are shown in Figure 6.1. The region's unemployment dropped to 9.4 percent in 2001, rose to 11.3 percent in 2003, and has been declining since. Employment in the region averaged 36,340 quarterly from



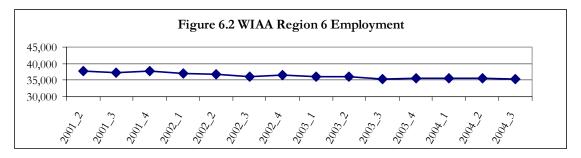
Source: Alabama Department of Industrial Relations.

the second quarter of 2001 to third quarter 2004 (Figure 6.2). Employment, which refers to the number of full-time and part-time jobs, was gradually and steadily declining over the period.

Table 6.1 WIAA Region 6 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Choctaw	5,513	5,039	474	8.60%
Dallas	16,437	14,776	1,661	10.11%
Marengo	8,910	8,362	548	6.15%
Perry	3,728	3,359	369	9.90%
Sumter	5,041	4,564	477	9.46%
Wilcox	3,772	3,321	451	11.96%
WIAA Region 6	43,401	39,421	3,980	9.17%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Choctaw	5,296	4,976	320	6.04%
Dallas	15,956	14,427	1,529	9.58%
Marengo	8,875	8,390	485	5.46%
Perry	3,625	3,296	329	9.08%
Sumter	4,949	4,611	338	6.83%
Wilcox	3,660	3,305	355	9.70%
WIAA Region 6	42,361	39,005	3,356	7.92%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **Commuting Patterns**

In 2000, roughly 1,000 more people commuted out of the region for work than commuted in (Table 6.2). There was significant commuting within the region as well. Dallas, Marengo, and Wilcox counties had net commuter inflow.

Table 6.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 53 percent of resident workers; between 20 and 40 minutes for 26 percent; and more than 40 minutes for 18 percent. Four percent of workers take more than an hour.

The commute is less than 10 miles for 43 percent of workers and about one quarter travel 10 to 25 miles. Almost 18 percent of workers travel more than 25 miles one-way, with roughly 12 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

Table 6.2 WIAA Region 6 Commuting Patterns

Area	Inflow, 2000			Outflow	, 2000	
	Number	Percent		Number	Percent	
Choctaw	774	12.5		1,495	20.7	
Dallas	1,900	30.6		1,797	24.8	
Marengo	1,504	24.2		1,149	15.9	
Perry	284	4.6		865	12.0	
Sumter	640	10.3		1,037	14.3	
Wilcox	1,105	17.8		889	12.3	
WIAA Region 6	6,207	100.0		7,232	100.0	
Average commute time (one-way), 2004  Less than 20 minutes 20 to 40 minutes				Percent of 52	.8	
40	inutes to an h			13.6		

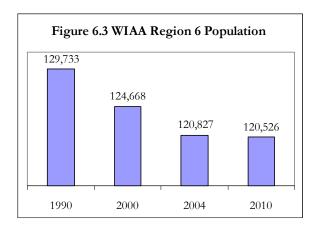
20 to 40 minutes	26.1
40 minutes to an hour	13.6
More than an hour	4.0
Average commute distance (one-way), 2004	Percent of workers
Less than 10 miles	43.2
10 to 25 miles	24.7
25 to 45 miles	15.6
More than 45 miles	12.2

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

## **Population**

The Region 6 population estimate of 120,827 for 2004 is 3.1 percent less than was recorded for 2000 (Figure 6.3 and Table 6.3). The population shrank in four counties. The region's population is projected to fall 3.3 percent in this decade to about 120,500 by 2010. Population will decline in all six counties. Employment growth is needed to mitigate declining population and reduce commuter outflow, especially because workers tend to minimize commuting over time by moving closer to their workplaces whenever possible. Reducing commuter outflow will place less of a burden on the region's roads, especially as 12



percent of workers travel more than 45 miles one-way to work. Economic development activities should therefore mainly focus on job growth.

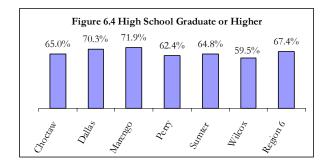
Table 6.3 WIAA Region 6 Population

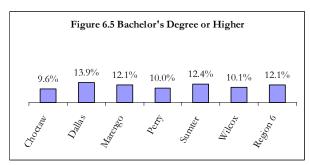
	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Choctaw	13,568	13,183	12,958	-1.7	12,981	-1.5
Dallas	16,174	14,798	14,141	-4.4	13,538	-8.5
Marengo	12,759	11,861	11,522	-2.9	11,283	-4.9
Perry	23,084	22,539	22,084	-2.0	21,800	-3.3
Sumter	48,130	46,365	44,884	-3.2	45,111	-2.7
Wilcox	16,018	15,922	15,238	-4.3	15,813	-0.7
WIAA Region 6	129,733	124,668	120,827	-3.1	120,526	-3.3
Alabama	4,040,587	<b>4,447,1</b> 00	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

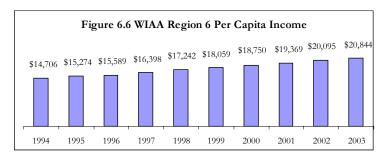
Educational attainment of Region 6 residents who are 25 years old and over is shown below in Table 6.4 and Figures 6.4 and 6.5. About 67 percent graduated from high school and 12 percent hold a bachelor's or higher degree. Educational attainment for all counties in the region is below the state level. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.





#### Per Capita Income

Per capita income (PCI) in Region 6 was at \$20,844 in 2003 (Figure 6.6), 42 percent higher than in 1994, and about \$5,660 or 21 percent less than the Alabama average of \$26,505. Marengo County had the highest PCI with \$24,188 and Wilcox had the lowest with \$17,441. All six counties' PCIs were below the state average.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

Table 6.4 Educational Attainment in 2000, Population 25 Years and Over

	Choctaw	Dallas	Marengo	Perry	Sumter	Wilcox	Region 6
Total	10,569	28,742	14,326	6,978	8,731	7,979	77,325
No schooling completed	317	645	259	206	276	244	1,947
Nursery to 4th grade	237	356	280	120	160	185	1,338
5th and 6th grade	341	941	411	280	400	182	2,555
7th and 8th grade	753	1,154	479	384	451	487	3,708
9th grade	465	1,240	618	330	352	313	3,318
10th grade	467	1,550	511	350	360	449	3,687
11th grade	470	1,225	685	441	459	584	3,864
12th grade, no diploma	654	1,413	777	514	619	784	4,761
High school graduate/equivalent	3,670	9,646	5,351	2,119	2,719	2,414	25,919
Some college, less than 1yr	587	1,599	761	513	439	418	4,317
Some college, 1+ yrs, no degree	1,119	3,355	1,765	735	1,123	792	8,889
Associate degree	476	1,614	697	285	287	318	3,677
Bachelor's degree	683	2,443	1,105	365	639	604	5,839
Master's degree	278	989	511	240	309	162	2,489
Professional school degree	43	510	72	48	91	25	789
Doctorate degree	9	62	44	48	47	18	228

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

## Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not

filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 6 had an underemployment rate of 28.5 percent in 2004. Applying this rate to August 2005 labor force data means that about 11,100 employed residents were underemployed (Table 6.5). Adding the unemployed gives a total available labor pool of 14,472 for the region. This pool is more than four times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 22.6 percent for Marengo County to 34.5 percent for Wilcox County. Dallas County has the largest available labor in the region and Perry County has the smallest.

Table 6.5 Available Labor in WIAA Region 6

	Region 6	<u>Choctaw</u>	<u>Dallas</u>	<u>Marengo</u>	<u>Perry</u>	<u>Sumter</u>	Wilcox
Labor Force	42,361	5,296	15,956	8,875	3,625	4,949	3,660
Employed	39,005	4,976	14,427	8,390	3,296	4,611	3,305
Underemployment rate	28.5%	25.0%	30.8%	22.6%	26.4%	30.9%	34.5%
Underemployed workers	11,116	1,244	4,444	1,896	870	1,425	1,140
Unemployed	3,356	320	1529	485	329	338	355
Available labor pool	14,472	1,564	5,973	2,381	1,199	1,763	1,495

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

#### **Industry Mix**

The manufacturing sector was the leading employer with 9,023 jobs in the second quarter of 2004 (Table 6.6). Rounding up the top five industries by employment are health care and social assistance; educational services; retail trade; and public administration. These five industries provided 24,536 jobs, 69 percent of the region total. The average monthly wage across all industries in the region was \$2,312. Two of the leading employers, manufacturing and educational services, paid more than this average. The highest average monthly wages were for utilities (\$3,667), wholesale trade (\$3,066), and mining (\$2,922). Accommodation and food services paid the least at \$920. Professional, scientific, and technical services had the highest average monthly new hire wages with \$2,469, followed by mining with \$2,456. Accommodation and food services paid the least average monthly new hire wages with \$711.

By broad industry classification, service producing industries provided about 60 percent of all covered jobs in the region in second quarter 2004 (Figure 6.7). Goods producing industries were next with 33 percent and public administration just over 7 percent.

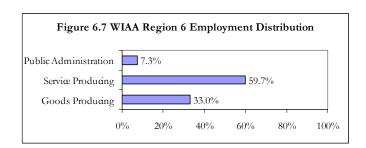


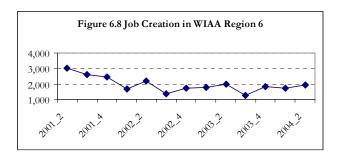
Table 6.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

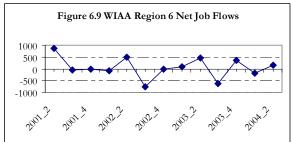
	77 . 1			Average	Average
Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Monthly Wage	Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,203	3.39%	8	\$2,252	\$2,090
21 Mining	129	0.36%	20	\$2,922	\$2,456
22 Utilities	403	1.13%	15	\$3,667	\$2,177
23 Construction	1,356	3.82%	7	\$2,659	\$2,020
31-33 Manufacturing	9,023	25.41%	1	\$2,876	\$1,672
42 Wholesale Trade	991	2.79%	10	\$3,066	\$2,423
44-45 Retail Trade	4,062	11.44%	4	\$1,669	\$1,107
48-49 Transportation and Warehousing	884	2.49%	11	\$2,762	\$2,440
51 Information	336	0.95%	16	\$2,705	\$1,963
52 Finance and Insurance	739	2.08%	12	\$2,663	\$1,732
53 Real Estate and Rental and Leasing	336	0.95%	16	\$1,928	\$1,179
54 Professional, Scientific, and Technical Services	553	1.56%	14	\$2,738	\$2,469
55 Management of Companies and Enterprises	288	0.81%	18	\$2,736	\$2,301
56 Administrative and Support and Waste					
Management and Remediation Services	664	1.87%	13	\$2,224	\$1,536
61 Educational Services	4,371	12.31%	3	\$2,381	\$1,194
62 Health Care and Social Assistance	4,494	12.65%	2	\$2,128	\$1,572
71 Arts, Entertainment, and Recreation	145	0.41%	19	\$1,479	\$917
72 Accommodation and Food Services	1,811	5.10%	6	\$920	\$711
81 Other Services (except Public Administration)	1,139	3.21%	9	\$1,240	\$1,092
92 Public Administration	2,586	7.28%	5	\$2,004	\$1,411
ALL INDUSTRIES	35,513	100.00%		\$2,312	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## Job Creation and Net Job Flows

On average, 1,972 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 6.8). Quarterly net job flows averaged 52 in the same period (Figure 6.9). Net job flows have ranged from a loss of 780 to a gain of about 870. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **High-Demand Occupations**

Table 6.7 shows the top 14 of about 360 occupations ranked by projected demand for jobs. Many of these occupations are common to the region's top five employment sectors identified earlier: manufacturing; health care and social assistance; educational services; retail trade; and public administration. Thus these sectors will continue to dominate employment in the region. Very few job openings for high-demand occupations are due to growth. This highlights the need to bring jobs to the region. The top five high-demand occupations are Combined Food Preparation and Serving Workers; General and Operations Managers; Food Batchmakers; Registered Nurses; and Truck Drivers, Heavy and Tractor-Trailer.

#### **Fast-Growing Occupations**

The 11 fastest growing occupations ranked by projected growth of employment are listed in Table 6.8. Many of these occupations are in production, health or health support, and installation and maintenance. The top five fast-growing occupations are Parking Lot Attendants; Painters, Transportation Equipment; Network Systems and Data Communications Analysts; Multiple Machine Tool Setters, Operators and Tenders, Metal and Plastic; and Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic. No occupation met the criteria used to select both high-demand and fast-growing occupations.

#### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 6.9 shows 50 selected highest earning occupations in the region. These high-earning occupations are mainly in health, legal, management, engineering, computer, and education fields. They are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. One occupation, Network Systems and Data Communications Analysts, is both high-earning and fast-growing.

Table 6.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Ann	ual Average Job	Openings
Occupation	Total	Due to Growth	Due to Separations
Combined Food Preparation and Serving Workers	25	0	25
General and Operations Managers	15	0	15
Food Batchmakers	15	5	10
Registered Nurses	15	0	15
Truck Drivers, Heavy and Tractor-Trailer	15	0	15
Sales Representatives, Except Technical and Scientific Products	10	0	10
Nursing Aides, Orderlies, and Attendants	10	0	10
First-Line Supervisors/Managers of Production and Operating Workers	10	0	10
Landscaping and Groundskeeping Workers	10	5	5
Industrial Truck and Tractor Operators	10	0	10
Customer Service Representatives	5	0	5
Water and Liquid Waste Treatment Plant and System Operators	5	0	5
Food Preparation Workers	5	0	5
Counter and Rental Clerks	5	0	5

Note: A minimum of 5 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

Table 6.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Employment		Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Parking Lot Attendants	10	30	200.0	11.61	0
Painters, Transportation Equipment	***	***	***	***	***
Network Systems and Data Communications Analysts	10	20	100.0	7.18	0
Multiple Machine Tool Setters, Operators and Tenders, Metal & Plastic	***	***	***	***	***
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	20	30	50.0	4.14	0
Medical Assistants	20	30	50.0	4.14	0
Nonfarm Animal Caretakers	***	***	***	***	***
Aircraft Mechanics and Service Technicians	***	***	***	***	***
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal & Plastic	***	***	***	***	***
Cooling and Freezing Equipment Operators and Tenders	***	***	***	***	***
Personal and Home Care Aides	***	***	***	***	***

Note: Selection criterion is annual growth rate of at least 1.8 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 6.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Family and General Practitioners	146,370
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
General and Operations Managers	85,821
Mathematicians	83,366
Pharmacists	83,075
Chiropractors	82,514
Computer and Information Systems Managers	81,078
Marketing Managers	79,435
Sales Managers	78,957
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Financial Managers	76,003
Medical and Health Services Managers	72,925
Purchasing Managers	72,488
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Construction Managers	67,163
Computer Programmers	66,789
Computer Systems Analysts	65,250
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Architects, Except Landscape and Naval	63,627
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
First-Line Supervisors/Managers of Non-Retail Sales Workers	63,149
Physical Therapists	61,714
Transportation, Storage, and Distribution Managers	61,630
Landscape Architects	60,965
Public Relations Managers	60,944
Administrative Services Managers	59,218
Judges, Magistrate Judges, and Magistrates	58,802
Biological Science Teachers, Postsecondary	58,090
Property, Real Estate, and Community Association Managers	57,720
Conservation Scientists	57,678
Advertising and Promotions Managers	56,014
Biomedical Engineers	
Computer Science Teachers, Postsecondary	55,702 55,620
•	55,620 54,538
Network and Computer Systems Administrators  Network Systems and Data Communications Applyates	54,538 54,350
Network Systems and Data Communications Analysts	54,350
Occupational Health and Safety Technicians	54,246
Database Administrators	54,142
First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	52,666
Loan Officers	52,333

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 6 currently has a low unemployment rate, but it also has a 14,500-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes 11,100 underemployed workers. The region's underemployed workers are willing to commute farther and longer; 61 percent are prepared for 20 or more minutes longer and 55 percent for 20 or more extra miles.

A lack of job opportunities in their areas, low wages at the available jobs, and living too far from those jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also frequently cited. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is declining, but at a slower rate than the labor force. Higher employment demand could reduce commuter outflow and present communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting. The state must help because of the severe lack of funds in the region.

Immigration is one way of growing the labor force through growth in the population, especially for a region that is losing residents. The region's population growth rate is below the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force to meet possible increases in employment demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers. This strategy will raise labor force participation and may be very effective given the region's population trend.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 6.10 shows the percentage of selected occupations in WIAA Region 6 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may

be more important and more extensively used in one occupation than another. Table 6.10 does not address such cross-occupational skill importance comparisons.

Table 6.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	Occupations	Occupations	Occupations
Active Learning	21%	18%	62%
Active Listening	79%	45%	84%
Critical Thinking	57%	27%	84%
Learning Strategies	21%	9%	16%
Mathematics	57%	18%	26%
Monitoring	36%	18%	28%
Reading Comprehension	86%	55%	92%
Science	0%	9%	24%
Speaking	64%	36%	62%
Writing	29%	9%	46%
Complex Problem Solving Skills			
Complex Problem Solving	0%	9%	44%
Resource Management Skills			
Management of Financial Resources	7%	0%	14%
Management of Material Resources	14%	0%	6%
Management of Personnel Resources	14%	0%	16%
Time Management	43%	36%	58%
Social Skills			
Coordination	36%	27%	38%
Instructing	36%	27%	30%
Negotiation	7%	0%	14%
Persuasion	14%	0%	18%
Service Orientation	43%	27%	18%
Social Perceptiveness	36%	36%	18%
Systems Skills			
Judgment and Decision Making	14%	27%	50%
Systems Analysis	0%	0%	6%
Systems Evaluation	0%	0%	10%
Technical Skills	0407	270/	007
Equipment Maintenance	21%	27%	0%
Equipment Selection	14%	45%	8%
Installation	0%	27%	4%
Operation and Control	29% 29%	36%	0% 0%
Operations Applying	29% 0%	36% 0%	20%
Operations Analysis Programming	0%	0%	20% 4%
Quality Control Analysis	0%	36%	4% 4%
Repairing	0%	30% 18%	4% 0%
Technology Design	0%	18% 9%	10%
Troubleshooting	14%	27%	14%
Troubleshoomig	1470	4170	1470

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/ Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama. In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations for which the most relevant skills are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in WIAA Region 6 is below that of the state. Sixty-seven percent of residents age 25 and over have graduated from high school and 12 percent have a bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. All the region's six counties have lower educational attainment than the state. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 6.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training. Some form of on-the-job training is the minimum requirement for most high-demand and fast-growing occupations. The challenge for the region is that future jobs are likely to require some postsecondary education and training as more of the lower wage jobs are shipped overseas.

Table 6.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree			5
Doctoral Degree			1
Master's Degree			4
Work Experience Plus a Bachelor's or Higher Degree	1		16
Bachelor's Degree		1	20
Associate Degree	1		
Postsecondary Vocational Training		1	
Work Experience in a Related Occupation	1		3
Long-term On-the-job Training	1		
Moderate On-the-job Training	3	6	1
Short-term On-the-job Training	7	3	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 6.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills for a region that has a large number of low wage jobs is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the June 2005 Annual Report of the Region 6 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

# There exists a significant and crucial need for focused industry training to address the emerging and future needs of the region.

Throughout the region an emphasis must be placed on instilling the "soft skills" (workplace ethics, appreciation of diversity, problem-solving, team-building, and communications) that apply to all industries and most small businesses. The state's 10-week FIT basic workplace skills training must be made available on a broader basis during the day and evening. Best practices should be drawn from successful programs, identified by employers not statistics, and taught to the leaders of the other programs within the state. Broader participation is needed in Industry-Education Alliances such as the Alabama Southern Industry Alliance for a Technologically Advanced Workforce. While Alabama Southern is not in this region, several of the industries in the Alliance are located here. This Scholarships-Internships-Jobs initiative provides funds from local industries to develop a "home-grown" workforce. This is a model that holds great promise for rural Alabama. The region's two-year colleges are committed to meeting the region's workforce training needs and need increased and more stable support for vocational, technical and occupational training.

In the Western part of the region training needs are increasing for pulp and paper companies and the forest products industries in general. In the Eastern part of the region, due to the recent momentum of Hyundai and its suppliers, automotive manufacturing and health care are constantly growing needs.

Action issue 2. How can/should worker skills be generally upgraded in the region?

#### Worker skills must be upgraded in the region!

Due to some of the negative topics listed earlier, Region 6, possibly more than any other region in the state, must focus on current residents and not rely on attracting a workforce to move into the region. Systems are in place through the career centers and higher education-based training programs to address most of these worker skills issues. One area of need in particular is multi-craft maintenance training provided by our community colleges. A regional Workforce Board must be established that can address local needs and provide targeted funding to meet the needs that are identified. No regionwide collaboration among educators, parents, HR professionals and/or plant managers, guidance counselors, and other professionals involved in workforce preparation targeting workforce needs for Region 6 and the training available through the Workforce Investment Act exists. Funds must be made available to host events to identify needs and educate local residents on new or expanding opportunities within the region.

Action issue 3. How can future workers be helped to make better choices about career preparation?

Future workers must be provided with accurate and timely information developed for the region in order to aid them in making better choices about education and training.

A strong, effective career guidance system in the school systems is vital to this need. An expansion of job shadowing opportunities for both teachers and students, school-to-career programs, and other opportunities to inform students and parents of opportunities that are developing within the region must be established. We must foster a paradigm shift for those who request better jobs for their children to one where parents (and others) emphasize preparation of the potential employee with the belief that when prepared, a good job will follow. Few programs exist that target both students and parents in a coordinated plan for career guidance. A plan was developed during the recent meetings of the Alabama-Tombigbee Leadership Initiative to host a day-long event and target minority churches with this type of program. Unfortunately, while this was a very high priority of the Workforce Development sub-committee, no funding was identified to sponsor such an event.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Creation of a multi-craft industrial maintenance training program (degree or certificate) within the region's community colleges is a tremendous need for this area.

With the influx of manufacturing jobs associated with Hyundai and related suppliers, and contracts that will likely occur in nearby communities related to avionics, flight training, and naval defense contracts, workers with these skills will be in high demand. Even if this need is met within the current workforce, a significant need to backfill current employers with workers who possess these skills will be necessary. (Typically these high-demand highly skilled technical workers often leave current employers lured to new companies by higher wages and/or signing bonuses.) This may become particularly damaging for companies in Dallas County.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

<u>Employers</u>—Employers must regularly communicate their current and projected workforce training needs to the appropriate training providers, and establish methods to offer candid feedback on training effectiveness. Participation in the Alliance has shown real promise. This program should be modeled throughout the region.

<u>Partner agencies</u>—These agencies should share information with each other about workforce training plans and initiatives, and collaborate when it is to the benefit of clients.

<u>Elected officials</u>—Should become familiar with workforce development issues and offer to bring employers and training providers together when it appears the workforce development system is not functioning well.

<u>Faith- and community-based organizations</u>—When these organizations have unique and valuable training capabilities, they should have an opportunity to provide training. Particularly in rural areas, these groups can provide an excellent outreach and exert significant influence on community residents.

<u>News media</u>—As a public service, the media can help highlight career opportunities and the education and training requirements for career entry and long-term success.

<u>State/government agencies</u>—These groups, particularly ADO, can offer advice on upcoming projects and provide introductions to bring new employers together with local training leaders and elected officials. Others who should participate in these activities by talking to service clubs, PTAs, and schools include EDPA, ATN, and AIDT.

Addressing the workforce training issues of older persons is a vital need.

There are a high number of older people (55 years of age and older) who have lost jobs and need new job training skills in order to compete in job market. Additional funding for the ATRC Senior Aides Job Training Program would help meet this growing need.

# WIAA Region 7 Workforce Report





# **Summary**

- Region 7 had a 4.3 percent unemployment rate in August 2005, with about 7,900 unemployed. However, the six-county region has a 55,200-strong available labor pool that is looking for better jobs and includes 47,300 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 70 percent are prepared for 20 or more minutes longer and 65 percent will go 20 or more extra miles.
- In 2000, about 13,400 residents commuted into the region for work, compared to 8,850 outcommuters. All counties, except Montgomery, had a net commuter outflow. Montgomery County had a net 6,150 commuter inflow. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is better than for Alabama. Of the age 25 and over
  population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher
  degree holders, compared to 78 percent and 23 percent, respectively, for the region.
  Montgomery County stands out with 80 percent high school graduates and 29 percent bachelor's
  or higher degree holders.

- Employment is currently growing faster than the labor force. More jobs might intensify commuter inflow, but also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than incommuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are public administration; retail trade; manufacturing; health care and social assistance; and accommodation and food services. These five industries provided almost 90,000 jobs, 55 percent of the region total in the second quarter of 2004. Two of the leading employers—public administration and manufacturing—had higher average monthly wages than the \$2,591 regional average.
- On average about 8,570 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 650. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Four occupations are both high-demand and fast-growing: Home Health Aides; Electricians; Security Guards; and First-Line Supervisors/Managers of Production and Operating Workers. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Office Clerks, General; and Waiters and Waitresses. The top five fast-growing occupations are Computer Software Engineers, Applications; Grinding and Polishing Workers, Hand; Home Health Aides; Computer Software Engineers, Systems Software; and Mechanical Engineers.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Of the top 10 high-earning occupations, seven are in health, two are legal, and one is management. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 39 selected high-demand, 34 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Four occupations are both high-earning and fast-growing: Sales Managers; Computer Software Engineers, Applications; Mechanical Engineers; and Industrial Engineers.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

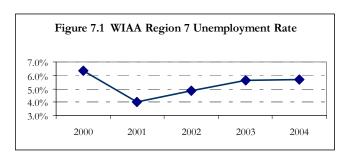
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Workforce Supply

## **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 7.1 shows labor force information for Region 7 and its six counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size lowered unemployment in 2005 for the region and its counties. The Crenshaw County labor force declined slightly.

Unemployment rates in 2004 ranged between 4.6 percent and 9.4 percent for the counties, with 5.7 percent for the region. In August 2005, the unemployment range was 3.2 percent to 8.0 percent, with a 4.3 percent rate for the region. Annual unemployment rates for 2000 to 2004 are shown in Figure 7.1. The region's unemployment dropped to 4.0 percent in 2001, rose to 5.7 percent in 2004, but has been declining since. Employment in the



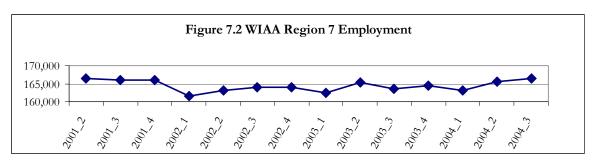
Source: Alabama Department of Industrial Relations.

region averaged 164,430 quarterly from the second quarter of 2001 to third quarter 2004 (Figure 7.2). Employment, which refers to the number of full-time and part-time jobs, has been recovering since the low point in the first quarter of 2002.

Table 7.1 WIAA Region 7 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Autauga	22,950	21,893	1,057	4.61%
Butler	9,146	8,287	859	9.39%
Crenshaw	5,819	5,427	392	6.74%
Elmore	33,043	31,501	1,542	4.67%
Lowndes	5,086	4,628	458	9.01%
Montgomery	105,950	99,865	6,085	5.74%
WIAA Region 7	181,994	171,601	10,393	5.71%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Autauga	23,361	22,518	843	3.61%
Butler	9,200	8,644	556	6.04%
Crenshaw	5,766	5,475	291	5.05%
Elmore	33,469	32,401	1,068	3.19%
Lowndes	5,176	4,761	415	8.02%
Montgomery	107,406	102,718	4,688	4.36%
WIAA Region 7	184,378	176,517	7,861	4.26%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **Commuting Patterns**

In 2000, about 4,540 more people commuted into the region for work than commuted out (Table 7.2). There was significant commuting within the region as well. All counties, except Montgomery, had a net commuter outflow. Montgomery County had a net 6,150 commuter inflow.

Table 7.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 50 percent of resident workers; between 20 and 40 minutes for 31 percent; and more than 40 minutes for 14 percent. About 3 percent of workers take more than an hour.

The commute is less than 10 miles for 42 percent of workers and about 28 percent travel 10 to 25 miles. About 25 percent of workers travel more than 25 miles one-way, with about 8 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

Table 7.2 WIAA Region 7 Commuting Patterns

Inflow,	2000	Outflow	, 2000
Number	Percent	Number	Percent
913	6.8	1,639	18.5
524	3.9	683	7.7
555	4.1	1,082	12.2
1,751	13.1	1,883	21.3
307	2.3	369	4.2
9,342	69.8	3,192	36.1
13,392	100.0	8,848	100.0
	Number 913 524 555 1,751 307 9,342	913 6.8 524 3.9 555 4.1 1,751 13.1 307 2.3 9,342 69.8	Number         Percent         Number           913         6.8         1,639           524         3.9         683           555         4.1         1,082           1,751         13.1         1,883           307         2.3         369           9,342         69.8         3,192

Average commute time (one-way), 2004	Percent of workers
Less than 20 minutes	50.2
20 to 40 minutes	31.3
40 minutes to an hour	10.8
More than an hour	3.2
Average commute distance (one-way), 2004	Percent of workers
Less than 10 miles	42.1
10 to 25 miles	28.1
25 to 45 miles	17.5
More than 45 miles	7.6

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

# **Population**

The Region 7 population estimate of 389,555 for 2004 is 2.1 percent higher than was recorded for 2000 (Figure 7.3 and Table 7.3). The population shrank in four counties. The region's population is projected to rise 10.4 percent in this decade to about 421,400 by 2010. Elmore and Autauga counties will grow the fastest, but Butler will lose residents. Faster employment growth is likely to intensify commuting into and within the region. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents. Such a strategy could reduce commuter burden on the region's roads.

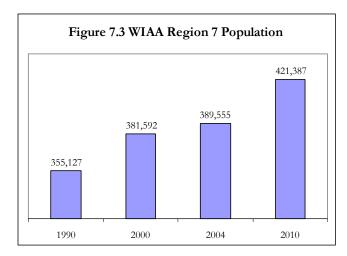


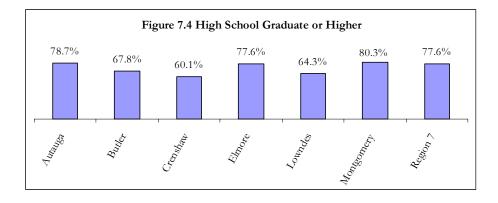
Table 7.3 WIAA Region 7 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Autauga	34,222	43,671	47,468	8.7	53,469	22.4
Butler	21,892	21,399	20,764	-3.0	20,806	-2.8
Crenshaw	13635	13,665	13,610	-0.4	13,710	0.3
Elmore	49,210	65,874	71,944	9.2	81,959	24.4
Lowndes	12,658	13,473	13,210	-2.0	14,065	4.4
Montgomery	223,510	223,510	222,559	-0.4	237,378	6.2
WIAA Region 7	355,127	381,592	389,555	2.1	421,387	10.4
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 7 residents who are 25 years old and over is shown below in Table 7.4 and Figures 7.4 and 7.5. About 78 percent graduated from high school and 23 percent hold a bachelor's or higher degree. Montgomery County leads with 80 percent high school graduates and 29 percent bachelor's or higher degree holders; Autauga and Elmore follow. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



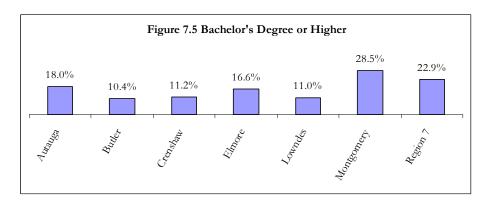


Table 7.4 Educational Attainment in 2000, Population 25 Years and Over

	Autauga	Butler	Crenshaw	Elmore	Lowndes	Montgomery	Region 7
Total	27,589	13,767	9,268	43,177	8,183	141,342	243,326
No schooling completed	196	244	235	306	292	1,658	2,931
Nursery to 4th grade	138	186	136	248	149	907	1,764
5th and 6th grade	368	499	374	523	278	2,061	4,103
7th and 8th grade	886	818	759	1,663	457	3,731	8,314
9th grade	1,028	696	525	1,617	345	3,774	7,985
10th grade	1,095	785	644	1,858	380	4,685	9,447
11th grade	1,136	634	494	1,842	439	4,837	9,382
12th grade, no diploma	1,025	577	533	1,622	585	6,252	10,594
High school graduate/equivalent	9,332	4,749	2,689	14,576	2,731	34,410	68,487
Some college, less than 1yr	2,053	940	479	3,405	382	9,331	16,590
Some college, 1+ yrs, no degree	3,971	1,595	938	6,123	933	22,237	35,797
Associate degree	1,389	611	423	2,221	311	7,165	12,120
Bachelor's degree	3,245	1,015	670	4,567	603	24,620	34,720
Master's degree	1,329	257	322	2,073	252	11,273	15,506
Professional school degree	276	142	46	407	38	2,970	3,879
Doctorate degree	122	19	1	126	8	1,431	1,707

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

### Per Capita Income

Per capita income (PCI) in Region 7 was at \$28,389 in 2003 (Figure 7.6), 45 percent higher than in 1994, and about \$1,900 or 7 percent more than the Alabama average of \$26,505. Montgomery County had the highest PCI with \$31,381 and Lowndes had the lowest with \$18,870. Only Montgomery County's PCI was above the state average.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various

reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 7 had an underemployment rate of 26.8 percent in 2004. Applying this rate to August 2005 labor force data means that about 47,300 employed residents were underemployed (Table 7.5). Adding the unemployed gives a total available labor pool of 55,168 for the region. This pool is about seven times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 23.2 percent for Lowndes County to 32.8 percent for Butler County. Montgomery County has the largest available labor in the region and Lowndes County has the smallest.

Table 7.5 Available Labor in WIAA Region 7

	Region 7	<u>Autauga</u>	<u>Butler</u>	Crenshaw	<u>Elmore</u>	Lowndes	Montgomery
Labor Force	184,378	23,361	9,200	5,766	33,469	5,176	107,406
Employed	176,517	22,518	8,644	5,475	32,401	4,761	102,718
Underemployment rate	26.8%	23.3%	32.8%	26.1%	24.7%	23.2%	28.4%
Underemployed workers	47,307	5,247	2,835	1,429	8,003	1,105	29,172
Unemployed	7,861	843	556	291	1068	415	4688
Available labor pool	55,168	6,090	3,391	1,720	9,071	1,520	33,860

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

### **Industry Mix**

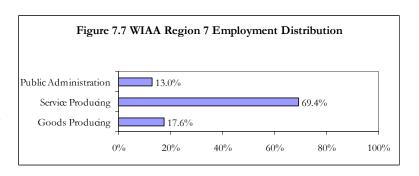
The public administration sector was the leading employer with 21,404 jobs in the second quarter of 2004 (Table 7.6). The rest of the top five industries by employment are retail trade; manufacturing; health care and social assistance; and accommodation and food services. These five industries provided almost 90,000 jobs, 55 percent of the region total. The average monthly wage across all industries in the region was \$2,591. Two of the leading employers—public administration and manufacturing—paid more than this average. The highest average monthly wages were for professional, scientific, and technical services (\$4,127), utilities (\$4,065), and finance and insurance (\$3,714). Accommodation and food services paid the least at \$1,161. Finance and insurance had the highest average monthly new hire wages with \$3,341, followed by professional, scientific, and technical services with \$2,876. Accommodation and food services paid the least average monthly new hire wages with \$808.

Table 7.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

	Total			Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,033	0.63%	18	\$2,334	\$1,946
21 Mining	250	0.15%	20	\$3,195	\$2,717
22 Utilities	1,288	0.78%	17	\$4,065	\$2,507
23 Construction	8,806	5.36%	7	\$2,782	\$2,242
31-33 Manufacturing	18,792	11.45%	3	\$2,985	\$2,650
42 Wholesale Trade	7,029	4.28%	10	\$3,336	\$2,509
44-45 Retail Trade	19,011	11.58%	2	\$1,973	\$1,287
48-49 Transportation and Warehousing	5,220	3.18%	13	\$2,539	\$1,888
51 Information	2,534	1.54%	15	\$3,139	\$2,175
52 Finance and Insurance	8,639	5.26%	9	\$3,714	\$3,341
53 Real Estate and Rental and Leasing	2,681	1.63%	14	\$2,412	\$1,636
54 Professional, Scientific, and Technical Services	6,933	4.22%	11	\$4,127	\$2,876
55 Management of Companies and Enterprises	785	0.48%	19	\$3,660	\$2,499
56 Administrative and Support and Waste					
Management and Remediation Services	8,788	5.35%	8	\$1,697	\$1,204
61 Educational Services	12,616	7.69%	6	\$2,409	\$1,303
62 Health Care and Social Assistance	17,295	10.54%	4	\$2,514	\$1,829
71 Arts, Entertainment, and Recreation	2,074	1.26%	16	\$1,513	\$1,006
72 Accommodation and Food Services	13,482	8.21%	5	\$1,161	\$808
81 Other Services (except Public Administration)	5,489	3.34%	12	\$2,131	\$1,595
92 Public Administration	21,404	13.04%	1	\$3,028	\$1,980
ALL INDUSTRIES	164,149	100.00%		\$2,591	

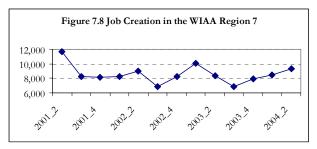
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

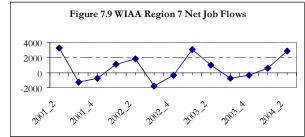
By broad industry classification, service producing industries provided about 69 percent of all covered jobs in the region in second quarter 2004 (Figure 7.7). Goods producing industries were next with 18 percent and public administration with 13 percent.



### Job Creation and Net Job Flows

On average, about 8,570 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 7.8). Quarterly net job flows averaged 650 in the same period (Figure 7.9). Net job flows have ranged from a loss of 1,800 to a gain of about 3,300. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table 7.7 shows the top 39 of more than 530 occupations ranked by projected demand for jobs. Many of these occupations are common to the region's top five employment sectors identified earlier: manufacturing; health care and social assistance; educational services; retail trade; and public administration. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Office Clerks, General; and Waiters and Waitersses.

#### **Fast-Growing Occupations**

The 34 fastest growing occupations ranked by projected growth of employment are listed in Table 7.8. Many of these occupations are in health or health support and computer. The top five fast-growing occupations are Computer Software Engineers, Applications; Grinding and Polishing

Workers, Hand; Home Health Aides; Computer Software Engineers, Systems Software; and Mechanical Engineers. Four occupations are both high-demand and fast-growing: Home Health Aides; Electricians; Security Guards; and First-Line Supervisors/Managers of Production and Operating Workers.

Table 7.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annı	ıal Average Jol	Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	385	80	305
Retail Salespersons	300	85	215
Combined Food Preparation and Serving Workers	270	95	175
Office Clerks, General	255	85	170
Waiters and Waitresses	250	60	190
Laborers and Freight, Stock, and Material Movers, Hand	175	40	135
Janitors and Cleaners, Except Maids	165	80	85
General and Operations Managers	155	65	90
Truck Drivers, Heavy and Tractor-Trailer	155	85	70
Registered Nurses	145	80	65
Bookkeeping, Accounting, and Auditing Clerks	130	45	85
Sales Representatives, Except Technical and Scientific Products	110	55	55
Customer Service Representatives	105	65	40
Teacher Assistants	95	50	45
Secretaries, Except Legal, Medical, and Executive	95	15	80
Nursing Aides, Orderlies, and Attendants	95	60	35
Child Care Workers	95	45	50
First-Line Supervisors/Managers, Retail Sales	90	40	50
First-Line Supervisors/Managers of Office and Administrative Support Workers	90	35	55
Accountants and Auditors	85	35	50
Maids and Housekeeping Cleaners	85	45	40
Maintenance and Repair Workers, General	80	45	35
Receptionists and Information Clerks	75	40	35
Home Health Aides**	75	60	15
Elementary School Teachers, Except Special Education	75	35	40
Licensed Practical and Licensed Vocational Nurses	75	35	40
Security Guards**	70	40	30
Tellers	65	15	50
Cooks, Institution and Cafeteria	60	20	40
Automotive Service Technicians and Mechanics	60	25	35
Secondary School Teachers, Except Special Education	60	25	35
Landscaping and Groundskeeping Workers	55	20	35
Packers and Packagers, Hand	55	25	30
First-Line Supervisors/Managers of Production and Operating Workers**	50	30	20
Electricians**	50	30	20
Food Preparation Workers	50	20	30
Executive Secretaries and Administrative Assistants	50	20	30
Carpenters	50	25	25
Counter and Rental Clerks	50	20	30

Note: A minimum of 50 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 7.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Employ	ment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Computer Software Engineers, Applications	170	280	64.7	5.12	10
Grinding and Polishing Workers, Hand	110	180	63.6	5.05	10
Home Health Aides**	960	1,560	62.5	4.97	75
Computer Software Engineers, Systems Software	130	210	61.5	4.91	10
Mechanical Engineers	130	210	61.5	4.91	15
Medical Records and Health Information Technicians	230	370	60.9	4.87	20
Medical Assistants	520	810	55.8	4.53	40
Industrial Engineers	150	230	53.3	4.37	15
Personal and Home Care Aides	290	440	51.7	4.26	20
Emergency Medical Technicians and Paramedics	290	430	48.3	4.02	20
Fitness Trainers and Aerobics Instructors	250	360	44.0	3.71	15
Preschool Teachers, Except Special Education	480	690	43.8	3.70	25
Public Relations Managers	260	370	42.3	3.59	15
Production, Planning, and Expediting Clerks	***	***	***	***	***
Social and Human Service Assistants	390	550	41.0	3.50	20
Dental Hygienists	200	280	40.0	3.42	10
Dental Assistants	280	390	39.3	3.37	20
Welders, Cutters, Solderers, and Brazers	440	610	38.6	3.32	30
Network and Computer Systems Administrators	240	330	37.5	3.24	15
Paralegals and Legal Assistants	280	380	35.7	3.10	10
Electricians**	890	1,200	34.8	3.03	50
Directors, Religious Activities and Education	320	430	34.4	3.00	15
Security Guards**	1,230	1,650	34.1	2.98	70
Mental Health and Substance Abuse Social Workers	150	200	33.3	2.92	10
Child, Family, and School Social Workers	300	400	33.3	2.92	15
Surveying and Mapping Technicians	90	120	33.3	2.92	10
Medical Transcriptionists	180	240	33.3	2.92	10
Welding, Solderers, and Brazers Machine Setters and Operators	120	160	33.3	2.92	10
Veterinary Assistants and Laboratory Animal Caretakers	150	200	33.3	2.92	10
Extruding, Forming, Pressing, and Comp. Mach. Set., Oper. and Tenders	***	***	***	***	***
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	480	640	33.3	2.92	20
First-Line Supervisors/Managers of Production and Operating Workers**	980	1,300	32.7	2.87	50
Sales Managers	370	490	32.4	2.85	20
Legal Secretaries	530	700	32.1	2.82	25

Note: Selection criterion is annual growth rate of at least 2.8 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

## **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 7.9 shows 50 selected highest earning occupations in the region. These high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. They are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. Four occupations are both high-earning and fast-growing: Sales Managers; Computer Software Engineers, Applications; Mechanical Engineers; and Industrial Engineers.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 7.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Surgeons	180,856
Obstetricians and Gynecologists	176,010
Internists, General	169,749
Family and General Practitioners	146,370
Podiatrists	142,667
Psychiatrists	137,197
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Administrative Law Judges, Adjudicators, and Hearing Officers	103,563
Engineering Managers	96,200
Computer and Information Scientists, Research	90,459
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Aerospace Engineers	84,344
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Computer Hardware Engineers	79,414
Sales Managers	78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	74,870
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
1 0	
Operations Research Analysts	66,518 65,250
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Aerospace Engineering and Operations Technicians	65,000
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 7 currently has a low unemployment rate, but it also has a 55,200-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes 47,300 underemployed workers. The region's underemployed workers are willing to commute farther and longer; 70 percent are prepared for 20 or more minutes longer and 65 percent for 20 or more extra miles.

Low wages at the available jobs and a lack of job opportunities in their areas are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also frequently cited. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is currently growing faster than the labor force. Higher employment demand could intensify commuter inflow, but also presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is above the state's rate and this is expected to continue through 2010. Another strategy to expand the labor force to meet possible increases in employment demand is to raise labor force participation by focusing on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 7.10 shows the percentage of selected occupations in WIAA Region 7 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 7.10 does not address such cross-occupational skill importance comparisons.

Table 7.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	Occupations	Occupations	Occupations
Active Learning	36%	50%	72%
Active Listening	85%	71%	80%
Critical Thinking	62%	59%	92%
Learning Strategies	31%	18%	6%
Mathematics	33%	24%	36%
Monitoring	44%	32%	30%
Reading Comprehension	79%	82%	92%
Science	0%	3%	32%
Speaking	72%	65%	62%
Writing	41%	56%	38%
Complex Problem Solving Skills			
Complex Problem Solving	3%	18%	40%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	5%	6%	2%
Management of Personnel Resources	10%	3%	12%
Time Management	49%	53%	48%
Social Skills			
Coordination	36%	47%	30%
Instructing	33%	32%	18%
Negotiation	5%	0%	18%
Persuasion	5%	9%	18%
Service Orientation	41%	35%	14%
Social Perceptiveness	49%	47%	14%
Systems Skills			
Judgment and Decision Making	23%	38%	72%
Systems Analysis	0%	6%	14%
Systems Evaluation	3%	0%	26%
Technical Skills	4.007		201
Equipment Maintenance	10%	12%	2%
Equipment Selection	15%	21%	8%
Installation	13%	15%	2%
Operation and Control	8%	6%	6%
Operation Monitoring	5%	12%	4%
Operations Analysis	3%	9%	22%
Programming	0%	6%	10%
Quality Control Analysis	3%	6%	4%
Repairing	13%	12%	0%
Technology Design	0%	6%	10%
Troubleshooting	10%	15%	16%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected highdemand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The high-demand and high-growth occupations in the region are dominated by occupations for which

the most relevant skills are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in WIAA Region 7 is below that of the state. Seventy-eight percent of residents age 25 and over have graduated from high school and 23 percent have a bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. Montgomery stands out with 80 percent high school graduates and 29 percent bachelor's or higher degree holders. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 7.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand jobs do not require postsecondary training; some form of on-the-job training is the minimum requirement. About 30 percent of fast-growing occupations require a bachelor's or higher degree. The challenge for the region is that future high-demand jobs are likely to require some postsecondary education and training.

Table 7.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree			13
Doctoral Degree			1
Master's Degree		1	2
Work Experience Plus a Bachelor's or Higher Degree	1	2	13
Bachelor's Degree	3	7	18
Associate Degree	1	3	1
Postsecondary Vocational Training	2	5	
Work Experience in a Related Occupation	3	1	1
Long-term On-the-job Training	2	3	
Moderate On-the-job Training	8	6	1
Short-term On-the-job Training	19	6	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 7.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

#### Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 7 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

The Region 7 Advisory Council suggests the following be the primary focus for the 2006-2007 and 2007-2008 program years:

- 1. Marketing of Existing Programs and Services. During advisory council discussions very few members were aware of the programs and services that were available in their own county or through state agencies. Many were also not aware of the programs being funded through WIA or how they could access those programs. More must be done at state and local levels to market the services that WIA funding supports and to support programs that could enhance WIA efforts through alternate funding streams. Without clients, these programs cannot exist and available workers must be made aware of how their public dollars can help them be trained or get a good job in their hometown.
- 2. Soft Skills Training. The largest set of skills most often lacking in today's workforce are not the technical skills needed to operate a piece of equipment or do a job, but rather the soft skills associated with being a good employee. These skills include modeling positive behaviors that give both them and their corporate employer a sense of satisfaction and security in that worker's ability and performance. These include: attendance, character, organization, respect, teamwork, personal appearance, honesty, and others. A comprehensive training program for soft skills is being introduced at Montgomery's Trenholm State Technical College in the fall of 2006 and would serve as a model for certified soft skills training for the region.
- **3. Upgrade Incumbent Worker Skills.** Additional funding and marketing of this program can impact the ability for existing industry to expand more than any other publicly-funded program currently in place. More attention should be given to industries looking to upgrade worker skills. These upgrades can ensure the worker has a stable future in the industry, reduce worker turnover, and give industry an opportunity to expand and add more jobs.
- **4. Increase Funding in Key Technical Fields.** Economic development recruitment efforts listed in the annual report, coupled with a strong desire to see existing business and industry grow, means

increasing efforts in targeted skills areas to ensure a ready, trained workforce is available to meet new demands. These areas include:

- Customer Service
- Electricians
- Industrial Maintenance
- Information Technology Technicians
- Machinists
- Medical Technical Specialists (radiologists, etc.)
- Transferable skills that can be used across industry sectors
- Welders
- Workplace Literacy (basic reading comprehension and math)

Financial support and setting forth policies that will enhance programs in these areas is needed at the postsecondary level. Highly qualified, experienced instructors and state-of-the art facilities and equipment need to be put into place to replace some of the outdated facilities and equipment. Additionally, the State of Alabama is encouraged to find the most cost-effective means to apply these additional funds and reduce the per capita cost for training workers.

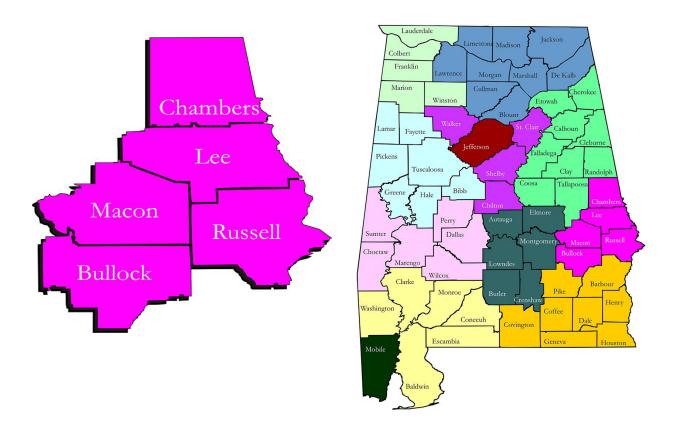
- **5. Implementation of a Workforce Development Assessment.** Business and industry need a comprehensive assessment of each candidate when he/she applies for a job. Most are able and willing to assess the candidate for the technical and academic skills required to perform the job duties required. However, there is no accepted assessment of applicants available. Such an assessment would enable businesses and industries to hire with increased efficiency. The Region 7 Workforce Development Advisory Council recommends the uniform implementation of the WorkKeys assessment to adequately evaluate a job seeker's ability to perform well in publicly-funded training programs to increase his/her potential for success in the program and on the job.
- **6. K-12 Education Must Become an Active Component of Workforce Development.** The importance of growing a skilled, educated workforce for an area is of critical importance to the Region 7 Advisory Council. As was stated previously, in order to ensure that quality workers enter the workforce prepared, middle, junior, and high schools in the area must understand their role in preparing these future workers and adopt a program immediately to see that soft skills, customer service, basic computer competencies, and limited technical skills taught are learned by all students.
- 7. Utilize Community Services and Agencies in Rural Areas. In rural parts of the Region 7 area, it is the community services and nonprofit agencies that provide the greatest level of service to those in need of workforce programs. In many cases, these smaller organizations are forced to work in competition with, and not in cooperation with, state agencies vying for the same client base and funding streams. More consolidation in rural areas could eliminate the duplication of programs and services. Anecdotal data indicate applicants are more inclined to seek assistance from a local nonprofit or faith-based organization than a state agency. In essence, this recommendation would create a community career development network based on the functions of workforce development as opposed to being based on traditional workforce development providers. This effort could also increase the potential to recapture workers ages 55 and over who have previously exited the workforce.
- **8. Recruit Additional Workers.** The unemployment rate in Region 7 is at an all time low. An increasing number of new jobs will lead to a workforce shortage if new skilled workers are not

recruited to the area. The economic health of the communities will stagnate if industries cannot expand or locate new businesses in the area due to a shortage of workers. Talent from neighboring states could provide additional workforce resources needed to manage the current challenge and provide a strong base for additional training and recruitment programs in the future.

- 9. Assist the Military in Transitioning Soldiers to the Civilian Workforce. A large military presence in the Region 7 area attracts a level of professionalism, skill, and talent second to none in the world. These soldiers often retire or leave active duty service in the area and seek employment. When employment isn't easily found, they will relocate to other states and communities quickly. A concentrated effort should be made to assist existing military transition programs in finding employment for exiting military personnel to keep their talent and skill in the area and thus increase the level of the workforce of the area.
- 10. Encourage Career Development Coordinators be Placed at Every High School. To better ensure that young people are educated about the career and training opportunities that exist in the Region, the Region 7 Advisory Committee suggests that Career Development Coordinators, in addition to guidance counselors, be placed at each high school to oversee a student's post-high school plans, and be sure he/she has a plan in place. This person could work with local workforce development agencies to access WIA services and programs, locate work opportunities, identify workforce skill deficiencies, and assist the student and his/her parents in making a choice that benefits the local workforce and the student's best interests. All high school students could participate in these activities through a required career development program, which we believe should be implemented in all public high schools.

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# **WIAA Region 8 Workforce Report**



# Summary

- Region 8 had a 4.5 percent unemployment rate in August 2005, with 5,060 unemployed. However, the five-county region has a roughly 33,750-strong available labor pool that is looking for better jobs and includes 28,700 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 50 percent are prepared for 20 or more minutes longer and 35 percent will go 20 or more extra miles.
- In 2000, about 30,500 residents commuted out of the region for work, compared to 10,650 incommuters. All counties, except Bullock, had a net commuter outflow. Eighty percent of the outflow was to Georgia. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is better than for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 73 percent and 18.5 percent, respectively, for the region. Lee County stands out with 81 percent high school graduates and 28 percent bachelor's or higher degree holders.

- Employment is currently growing faster than the labor force. More jobs might reduce commuter outflow, but also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing; educational services; retail trade; health care and social assistance; and accommodation and food services. These five industries provided 45,570 jobs, 67 percent of the region total in the second quarter of 2004. Two of the leading employers—manufacturing and educational services—had higher average monthly wages than the \$2,361 regional average.
- On average about 3,850 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 325. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Three occupations are both high-demand and fast-growing: Customer Service Representatives; Receptionists and Information Clerks; and Food Preparation Workers. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and General and Operations Managers. The top five fast-growing occupations are Personal and Home Care Aides; Pharmacists; Home Health Aides; Welders, Cutters, Solderers, and Brazers; and Preschool Teachers, Except Special Education.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Of the top 10 high-earning occupations, four are in health and four are in management. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 29 selected high-demand, nine selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. One occupation, Pharmacists, is both high-earning and fast-growing.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and

more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.

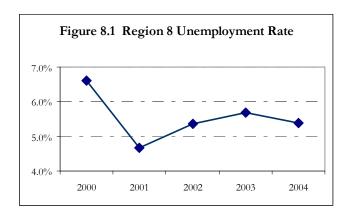
- Skill and education requirements for jobs keep rising. This emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

# Workforce Supply

# **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 8.1 shows labor force information for Region 8 and its five counties for 2004 and August 2005. Shrinking labor force and rising numbers of employed residents lowered unemployment in 2005 for the region and its counties. Only Russell County's labor force grew; Bullock and Chambers counties' number of employed fell.

Unemployment rates in 2004 ranged from 4.2 percent to 11.6 percent for the counties, with 5.4 percent for the region. In August 2005, the unemployment range was 3.3 percent to 9.9 percent, with 4.5 percent for the region. The unemployment rate for the region sank to 4.7 percent in 2001, rose to 5.7 percent in 2003, and has been falling since (Figure 8.1). Employment, the number of full-time and part-time jobs, averaged 68,450 quarterly from the second quarter of 2001 to third quarter 2004 and has been recovering since 2003 (Figure 8.2).

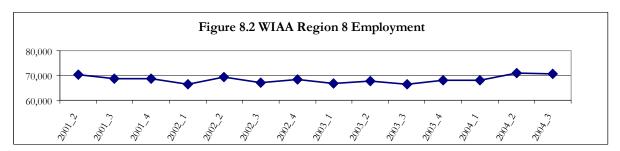


Source: Alabama Department of Industrial Relations.

Table 8.1 WIAA Region 8 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Bullock	3,919	3,464	455	11.61%
Chambers	16,789	15,629	1,160	6.91%
Lee	62,818	60,196	2,622	4.17%
Macon	8,663	8,092	571	6.59%
Russell	21,003	19,725	1,278	6.08%
WIAA Region 8	113,192	107,106	6,086	5.38%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Bullock	3,841	3,462	379	9.87%
Chambers	16,486	15,534	952	5.77%
Lee	62,768	60,705	2,063	3.29%
Macon	8,602	8,115	487	5.66%
Russell	21,199	20,020	1,179	5.56%
WIAA Region 8	112,896	107,836	5,060	4.48%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **Commuting Patterns**

In 2000, about 20,000 more people commuted out of the region for work than commuted in (Table 8.2). Eighty percent of the outflow was to Georgia. All counties, except Bullock, had net commuter outflows. There was significant commuting within the region as well.

Table 8.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 56 percent of resident workers; between 20 and 40 minutes for 32 percent; and more than 40 minutes for 11 percent. Two percent of workers take more than an hour.

The commute is less than 10 miles for 43 percent of workers and about 33 percent travel 10 to 25 miles. Twenty-one percent of workers travel more than 25 miles one-way, with 4.6 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

### **Population**

The Region 8 population estimate of 239,951 for 2004 is 1.1 percent higher than was recorded for 2000 (Figure 8.3 and Table 8.3). Only Lee County's population grew. The region's population is projected to rise 11.8 percent in this decade to about 265,500 by 2010.

Lee County will grow the fastest, but Chamber and Macon will lose residents. Faster employment growth is likely to reduce out-commuting. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents. This strategy could reduce commuter burden on the region's roads.

Table 8.2 WIAA Region 8 Commuting Patterns

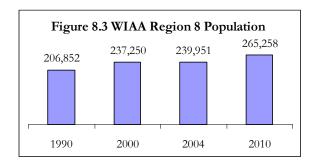
Area	Inflow,	2000	Outflow	, 2000	
	Number	Percent	Number	Percent	
Bullock	1,079	10.1	1,036	3.4	
Chambers	1,791	16.8	4,251	13.9	
Lee	3,340	31.4	11,850	38.9	
Macon	1,096	10.3	1,698	5.6	
Russell	3,344	31.4	11,649	38.2	
WIAA Region 8	10,650	100.0	30,484	100.0	
Less 20 to 40 m	Average commute time (one-way), 2004  Less than 20 minutes  20 to 40 minutes  40 minutes to an hour  More than an hour			f workers .5 .9 .2	
Average commut	Average commute distance (one-way), 2004			f workers	
Less than 10 miles			43	43.1	
10 to	25 miles		32	.5	

Note: Rounding errors may be present.

25 to 45 miles

More than 45 miles

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.



16.4

4.6

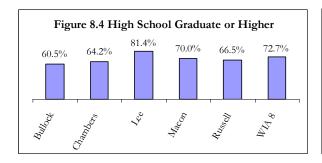
Table 8.3 WIAA Region 8 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Bullock	11042	11,714	11,229	-4.1	12,145	3.7
Chambers	36,876	36,583	35,567	-2.8	36,355	-0.6
Lee	87,146	115,092	120,714	4.9	141,303	22.8
Macon	24,928	24,105	23,179	-3.8	23,389	-3.0
Russell	46,860	49,756	49,262	-1.0	52,066	4.6
WIAA Region 8	206,852	237,250	239,951	1.1	265,258	11.8
Alabama	4,040,587	<b>4,447,1</b> 00	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 8 residents who are 25 years old and over is shown below in Table 8.4 and Figures 8.4 and 8.5. About 78 percent graduated from high school and 23 percent hold a bachelor's or higher degree. Lee County stands out with 81 percent high school graduates and 28 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



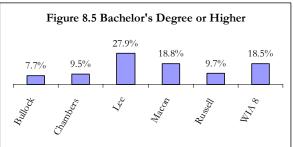


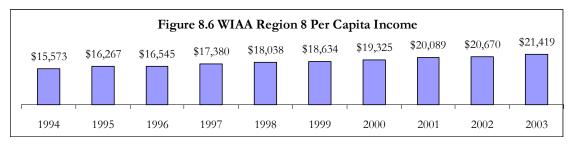
Table 8.4 Educational Attainment in 2000, Population 25 Years and Over

	Bullock	Chambers	Lee	Macon	Russell	Region 8
Total	7,570	24,497	62,170	13,955	32,107	140,299
No schooling completed	143	491	557	247	630	2,068
Nursery to 4th grade	117	251	456	170	482	1,476
5th and 6th grade	297	851	995	506	987	3,636
7th and 8th grade	588	1,464	1,592	622	1,675	5,941
9th grade	325	1,492	1,569	435	1,584	5,405
10th grade	565	1,603	2,234	610	2,028	7,040
11th grade	508	1,469	1,840	641	1,723	6,181
12th grade, no diploma	449	1,157	2,314	957	1,640	6,517
High school graduate/equivalent	2,667	7,863	16,576	3,486	10,594	41,186
Some college, less than 1yr	445	1,742	3,572	867	2,111	8,737
Some college, 1+ yrs, no degree	658	2,661	8,994	2,018	3,874	18,205
Associate degree	222	1,114	4,120	779	1,669	7,904
Bachelor's degree	330	1,553	9,402	1,446	2,009	14,740
Master's degree	208	581	4,793	878	825	7,285
Professional school degree	36	140	927	161	244	1,508
Doctorate degree	12	65	2,229	132	32	2,470

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### Per Capita Income

Per capita income (PCI) in Region 8 was \$21,419 in 2003 (Figure 8.6), 38 percent higher than in 1994, and \$5,086 or 19 percent less than the Alabama average of \$26,505. Lee County had the highest PCI with \$22,278 and Macon had the lowest with \$17,319. All five counties' PCIs were below the state average.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

# Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 8 had an underemployment rate of 26.6 percent in 2004. Applying this rate to August 2005 labor force data means that about 28,700 employed residents were underemployed

(Table 8.5). Adding the unemployed gives a total available labor pool of 33,744 for the region. This pool is roughly seven times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 21.6 percent for Lee County to 32.8 percent for Macon County. Lee County has the largest available labor and Bullock County has the smallest.

Table 8.5 Available Labor in WIAA Region 8

	Region 8	Bullock	Chambers	<u>Lee</u>	<u>Macon</u>	Russell
Labor Force	112,896	3,841	16,486	62,768	8,602	21,199
Employed	107,836	3,462	15,534	60,705	8,115	20,020
Underemployment rate	26.6%	25.9%	28.7%	21.6%	32.8%	26.3%
Underemployed workers	28,684	897	4,458	13,112	2,662	5,265
Unemployed	5,060	379	952	2063	487	1179
Available labor pool	33,744	1,276	5,410	15,175	3,149	6,444

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

### **Industry Mix**

The manufacturing sector was the leading employer with 11,559 jobs in the second quarter of 2004 (Table 8.6). The rest of the top five industries by employment are educational services; retail trade; health care and social assistance; and accommodation and food services. These five industries provided 45,570 jobs, 67 percent of the region total. The average monthly wage across all industries in the region was \$2,361. Two of the leading employers—manufacturing and educational services—paid more than this average. The highest average monthly wages were for utilities (\$3,312), manufacturing (\$3,268), and wholesale trade (\$3,086). Accommodation and food services paid the least at \$1,052. Construction had the highest average monthly new hire wages with \$2,629, followed by mining with \$2,626. Accommodation and food services paid the least average monthly new hire wages with \$754.

By broad industry classification, service producing industries provided about 71 percent of all covered jobs in the region in second quarter 2004 (Figure 8.7). Goods producing industries were next with 24 percent and public administration with 6 percent.

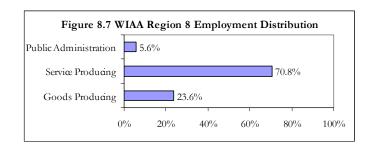


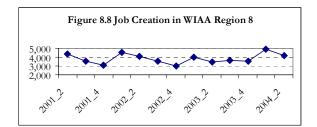
Table 8.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

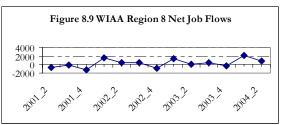
Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Average Monthly Wage	Average Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	1,107	1.62%	15	\$2,537	\$1,772
21 Mining	146	0.21%	20	\$3,043	\$2,626
22 Utilities	638	0.93%	18	\$3,312	\$2,207
23 Construction	3,363	4.92%	7	\$2,647	\$2,629
31-33 Manufacturing	11,559	16.90%	1	\$3,268	\$2,298
42 Wholesale Trade	1,195	1.75%	13	\$3,081	\$2,402
44-45 Retail Trade	8,741	12.78%	3	\$1,855	\$1,209
48-49 Transportation and Warehousing	2,031	2.97%	9	\$2,381	\$1,778
51 Information	768	1.12%	17	\$2,511	\$1,692
52 Finance and Insurance	1,444	2.11%	11	\$2,929	\$2,341
53 Real Estate and Rental and Leasing	988	1.44%	16	\$1,892	\$1,337
54 Professional, Scientific, and Technical Services	1,335	1.95%	12	\$2,471	\$1,854
55 Management of Companies and Enterprises	162	0.24%	19	\$2,230	\$2,592
56 Administrative and Support and Waste					
Management and Remediation Services	3,210	4.69%	8	\$1,560	\$1,224
61 Educational Services	10,621	15.53%	2	\$2,894	\$1,616
62 Health Care and Social Assistance	7,338	10.73%	4	\$2,291	\$1,595
71 Arts, Entertainment, and Recreation	1,160	1.70%	14	\$1,445	\$911
72 Accommodation and Food Services	7,311	10.69%	5	\$1,052	\$754
81 Other Services (except Public Administration)	1,449	2.12%	10	\$1,645	\$1,390
92 Public Administration	3,828	5.60%	6	\$2,268	\$1,491
ALL INDUSTRIES	68,394	100.00%		\$2,361	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

# Job Creation and Net Job Flows

On average, about 3,850 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 8.8). Quarterly net job flows averaged 325 in the same period (Figure 8.9). Net job flows have ranged from a loss of 830 to a gain of about 2,200. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

#### **High-Demand Occupations**

Table 8.7 shows the top 29 of about 500 occupations ranked by projected demand for jobs. Many of these occupations are common to the region's top five employment sectors: manufacturing; educational services; retail trade; health care and social assistance; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and General and Operations Managers.

# **Fast-Growing Occupations**

The nine fastest growing occupations ranked by projected growth of employment are listed in Table 8.8. The top five fast-growing occupations are Personal and Home Care Aides; Pharmacists; Home Health Aides; Welders, Cutters, Solderers, and Brazers; and Preschool Teachers, Except Special Education. Three occupations are both high-demand and fast-growing: Customer Service Representatives; Receptionists and Information Clerks; and Food Preparation Workers.

## **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 8.9 shows 50 selected highest earning occupations in the region. These high-earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. They are generally not fast-growing or high-demand. One occupation, General and Operations Managers, is both high-earning and high-demand. One occupation, Pharmacists, is both high-earning and fast-growing.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 8 currently has a low unemployment rate, but it also has a 33,744-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes nearly 28,700 underemployed workers who are willing to commute farther and longer; 50 percent are prepared for 20 or more minutes longer and 35 percent for 20 or more extra miles.

Low wages at the available jobs and a lack of job opportunities in their areas are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also frequently cited. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Table 8.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annua	al Average Jo	b Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	210	30	180
Retail Salespersons	145	35	110
Combined Food Preparation and Serving Workers	145	40	105
Waiters and Waitresses	130	25	105
General and Operations Managers	60	20	40
Customer Service Representatives**	60	35	25
Registered Nurses	60	25	35
Office Clerks, General	55	10	45
Teacher Assistants	50	20	30
Janitors and Cleaners, Except Maids	50	15	35
Licensed Practical and Licensed Vocational Nurses	50	20	30
Secretaries, Except Legal, Medical, and Executive	45	5	40
Child Care Workers	45	15	30
Truck Drivers, Heavy and Tractor-Trailer	45	20	25
Nursing Aides, Orderlies, and Attendants	45	20	25
Maids and Housekeeping Cleaners	45	20	25
Elementary School Teachers, Except Special Education	40	15	25
First-Line Supervisors/Managers, Retail Sales	40	15	25
Landscaping and Groundskeeping Workers	40	15	25
First-Line Supervisors/Managers of Office and Administrative Support Workers	35	10	25
Bookkeeping, Accounting, and Auditing Clerks	30	5	25
Secondary School Teachers, Except Special Education	30	10	20
Receptionists and Information Clerks**	30	15	15
Maintenance and Repair Workers, General	30	5	25
Construction Laborers	25	15	10
Cooks, Fast Food	25	0	25
Sales Representatives, Except Technical and Scientific Products	25	10	15
Cooks, Institution and Cafeteria	25	5	20
Food Preparation Workers**	25	10	15

Note: A minimum of 25 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

Table 8.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Emplo	yment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Personal and Home Care Aides	180	270	50.0	4.14	15
Pharmacists	230	320	39.1	3.36	15
Home Health Aides	420	550	31.0	2.73	20
Welders, Cutters, Solderers, and Brazers	380	490	28.9	2.57	20
Preschool Teachers, Except Special Education	320	410	28.1	2.51	15
Counter and Rental Clerks	260	330	26.9	2.41	15
Customer Service Representatives**	1,360	1,700	25.0	2.26	60
Receptionists and Information Clerks**	650	790	21.5	1.97	30
Food Preparation Workers**	430	520	20.9	1.92	25

Note: Selection criterion is annual growth rate of at least 1.9 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 8.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Surgeons	180,856
Family and General Practitioners	146,370
Pediatricians, General	144,581
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Engineering Managers	96,200
Natural Sciences Managers	88,795
General and Operations Managers	85,821
Mathematicians	83,366
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Sales Managers	79,433 78,957
Securities, Commodities, and Financial Services Sales Agents	
	78,458
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	74,870
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Forestry and Conservation Science Teachers, Postsecondary	68,610
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Operations Research Analysts	66,518
Physics Teachers, Postsecondary	65,710
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Economics Teachers, Postsecondary	64,560
Education Administrators, Elementary and Secondary School	64,480
Architects, Except Landscape and Naval	63,627
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

Employment is currently growing faster than the labor force. Higher employment demand could intensify commuter inflow, but also presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is expected to be faster than the state's rate through 2010. Another strategy to expand the labor force to meet possible increases in employment demand is to raise labor force participation by focusing on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 8.10 shows the percentage of selected occupations in WIAA Region 8 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 8.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The region's high-demand and high-growth occupations are dominated by those for which the most relevant skills are active listening, reading comprehension, speaking, writing, and service orientation.

#### **Education and Training Issues**

Educational attainment in WIAA Region 8 is below that of the state. Seventy-three percent of residents age 25 and over have graduated from high school and 18.5 percent have a bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. Lee County stands out with 81 percent high school graduates and 28 percent bachelor's or higher degree holders. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 8.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand and fast jobs do not require postsecondary training; some form of on-the-job training is the minimum requirement. About 30 percent of fast-growing occupations require a bachelor's or higher degree. The challenge for the region is that future high-demand jobs are likely to require some postsecondary education and training.

Table 8.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills			
Active Learning	31%	33%	70%
Active Listening	79%	89%	84%
Critical Thinking	62%	56%	94%
Learning Strategies	41%	56%	18%
Mathematics	28%	44%	38%
Monitoring	38%	56%	30%
Reading Comprehension	72%	89%	96%
Science	0%	11%	38%
Speaking	72%	89%	66%
Writing	38%	56%	48%
Complex Problem Solving Skills			
Complex Problem Solving	0%	0%	42%
Resource Management Skills			
Management of Financial Resources	3%	0%	12%
Management of Material Resources	3%	0%	2%
Management of Personnel Resources	10%	0%	14%
Time Management	48%	44%	52%
Social Skills			
Coordination	28%	33%	28%
Instructing	45%	44%	30%
Negotiation	7%	0%	18%
Persuasion	7%	0%	16%
Service Orientation	48%	56%	12%
Social Perceptiveness	55%	67%	16%
Systems Skills			
Judgment and Decision Making	17%	0%	60%
Systems Analysis	0%	0%	14%
Systems Evaluation	0%	0%	20%
Technical Skills	100/	4407	
Equipment Maintenance	10%	11%	0%
Equipment Selection	10%	11%	4%
Installation	3%	11%	0%
Operation and Control	3%	11%	4%
Operation Monitoring	7%	11%	2%
Operations Analysis	0%	0%	24%
Programming	0%	0%	6%
Quality Control Analysis	0%	11%	4%
Repairing	7%	11%	0%
Technology Design	0%	0%	12%
Troubleshooting	7%	0%	12%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Table 8.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		1	10
Doctoral Degree			5
Master's Degree			3
Work Experience Plus a Bachelor's or Higher Degree	1		13
Bachelor's Degree	2		17
Associate Degree	1		
Postsecondary Vocational Training	1	1	
Work Experience in a Related Occupation	2		1
Long-term On-the-job Training		1	
Moderate On-the-job Training	8	1	1
Short-term On-the-job Training	14	5	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 8.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

### Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 8 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

A focused effort in the region to promote the workforce development plan is needed in some of the more rural counties. Services deemed appropriate for the area's industries should be coordinated with the major employers. Distribution of information regarding training opportunities should be provided to displaced workers and those currently employed so that career changes later in life are not disruptive or traumatic experiences. Some areas of the region address these needs well.

Because of the differences between educational opportunities in Region 8, a need to increase the opportunity for hands on career technical programs and classes at the high school level to address the skills and needs of regional employers was identified. This included training programs that addressed health care and manufacturing needs seen in the community. To provide a standard of excellence for these high school programs and increase their alignment to postsecondary training and industry, it was encouraged that these programs participate and complete a business/industry certification program.

Action issue 2. How can/should worker skills be generally upgraded in the region?

Region 8 members expressed a concern that educational institutions should communicate with industry and identify the skills required so that training programs and curricula can be aligned with industry/manufacturing needs. Better linkages should be developed between these two stakeholders to facilitate the sharing of information.

In addition, companies that require upgrading the skills of their existing employees should be knowledgeable of resources for assistance. Coordination of these services is essential to maximizing service delivery and reducing duplication of services between organizations. The Auburn Training Connection and Southern Union State Community College are working well together in the Auburn-Opelika Metropolitan area.

Action issue 3. How can future workers be helped to make better choices about career preparation?

As mentioned earlier, it is imperative to coordinate services between the secondary, postsecondary, government, and the employment sector, resulting in a skilled workforce. Stronger ties between secondary and postsecondary programs are essential in building the foundation for an effective transition to viable career pathways. An emphasis on career guidance through a strong and effective counseling system in the school systems is important. Expanding the use of job shadowing and the Choices program offered through some chambers of commerce would achieve positive results. Implementation of a structured apprenticeship program is needed. Career Technical programs at community colleges can actively participate in the dissemination of program information to the middle grades and secondary programs, explaining entry requirements, and exposing students to the opportunities in industry/manufacturing. The media and representatives from the state level can play a supportive role by highlighting careers in growing fields and the benefits of training beyond the high school level. This information is being distributed to students in the Auburn city school system via the Auburn Training Connection but could always be strengthened.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

Yes, AIDT has been successful in Region 8 in the past in pre-hire training. Regional coordination is required for similar programs for existing industry. The region should be proactive in providing training in areas deemed to be needed in the future. Industry in Region 8 is more concerned with worker performance than worker credentials therefore shorter, skill specific training should be offered in addition to traditional curriculum.

Other action issues. As mentioned earlier, health care has occupations that are experiencing phenomenal growth and worker shortages. The community colleges and career/technical colleges have training opportunities available, but these programs need to be expanded and aligned with the future needs of the expanding health care providers within the region. East Alabama Health Care has developed a comprehensive program which addresses the needs of individuals from birth to death and offers a wide range of employment opportunities to the workforce within Region 8. The development of a strong partnership between the health care organizations within Region 8 and the various training providers needs to be emphasized so that workers can be trained and equipped to work within the areas of need.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

<u>Employers</u>. Employers should communicate their workforce training needs to their local economic development organizations and the appropriate training providers, and also provide feedback on training effectiveness. Employers' participation in alliances with career centers, career technical colleges, and workforce development programs is essential.

<u>Partner agencies</u>. Collaboration of services provided by partner agencies is essential; to accomplish this, these agencies should share information with each other about workforce training plans and initiatives that will benefit their client base. These agencies should also lead the effort to disseminate information to government, secondary, postsecondary, and employment sectors. They should provide insight into current and future education needed by area industry.

<u>Elected officials</u>. Elected officials should become familiar with workforce development issues and offer support whenever appropriate. They should be knowledgeable of their region's needs and work with other elected officials to advocate for the region.

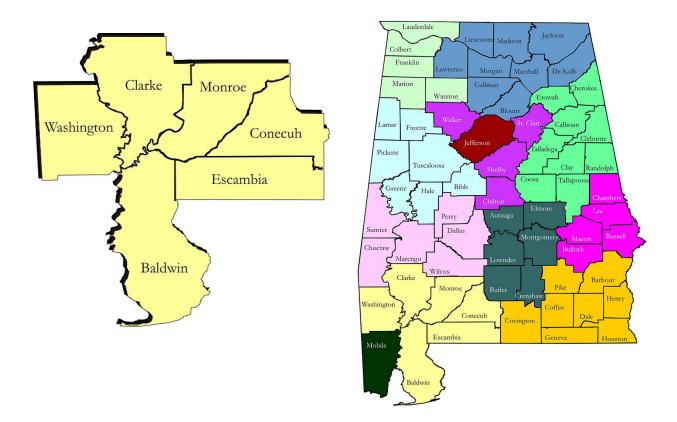
<u>Faith- and community-based organizations</u>. When these organizations have the opportunity to provide support or participate in the distribution of information they should be included.

<u>News media</u>. The media, through the use of public service announcements, should help highlight career opportunities and education or training programs available in the region. The focus should be on career entry requirements and career pathways that lead to long-term success.

It should be remembered that local entities are the direct connection to local employers. These entities should collaborate regionally to address similar needs, presenting these where appropriate to the state and federal agencies. State funding should be available to these local entities, local schools

for needed technical training classes and programs, as well as for career technical and communic colleges.	ty

# WIAA Region 9 Workforce Report



# Summary

- Region 9 had a 4.3 percent unemployment rate in August 2005, with 5,260 unemployed. However, the six-county region has a roughly 32,000-strong available labor pool that is looking for better jobs and includes about 26,750 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 54 percent are prepared for 20 or more minutes longer and 50 percent will go 20 or more extra miles.
- In 2000, about 23,100 residents commuted out of the region for work, compared to 12,400 incommuters. All counties, except Clarke and Escambia, had net commuter outflows. Nearly two-thirds of the outflow was to Mobile County. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is somewhat comparable to that for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 76 percent and 17 percent, respectively, for the region. Baldwin County leads with 82 percent high school graduates and 23 percent bachelor's or higher degree holders.

- Employment is currently growing faster than the labor force. More jobs might reduce commuter outflow, but also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-ofschool youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than incommuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing; retail trade; health care and social assistance; accommodation and food services; and educational services. These five industries provided 53,784 jobs, 61 percent of the region total in the second quarter of 2004. Two of the leading employers—manufacturing and educational services—had higher average monthly wages than the \$2,433 regional average.
- On average about 5,620 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 550. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Fourteen occupations are both high-demand and fast-growing. The five in highest demand are Waiters and Waitresses; Combined Food Preparation and Serving Workers; Maids and Housekeeping Cleaners; Registered Nurses; and Teacher Assistants. The top five high-demand occupations are Cashiers; Retail Salespersons; Waiters and Waitresses; Combined Food Preparation and Serving Workers; and Laborers and Freight, Stock, and Material Movers, Hand. The top five fast-growing occupations are Home Health Aides; Dental Assistants; Directors, Religious Activities and Education; Counter and Rental Clerks; and Aircraft Mechanics and Service Technicians.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and education fields. Of the top 10 high-earning occupations, four are in health, five are in management, and one is legal. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 34 selected highdemand, 39 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. One occupation is both high-earning and fast-growing; Education Administrators, Elementary and Secondary.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and highgrowth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

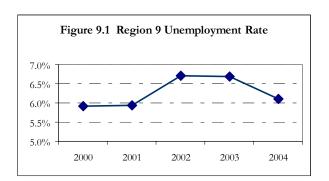
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## Workforce Supply

### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 9.1 shows labor force information for Region 9 and its six counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size lowered unemployment in 2005 for the region and its counties. Only Baldwin County's labor force grew; Clarke and Washington counties' numbers of employed fell.

Unemployment rates in 2004 ranged from 4.8 percent to 8.8 percent for the counties, with 6.1 percent for the region. In August 2005, the unemployment range was 3.2 percent to 6.7 percent, with 4.3 percent for the region. Annual unemployment rates in the region rose to 6.7 percent in 2002, but have been falling since (Figure 9.1). Employment, the number of full-time and part-time jobs, averaged 88,450 quarterly from the second quarter of 2001 to third quarter 2004 and has been recovering since 2003 (Figure 9.2).

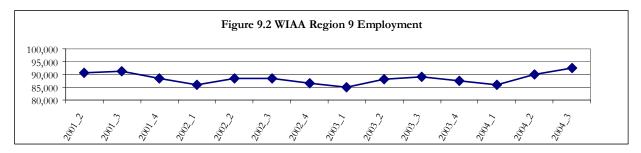


Source: Alabama Department of Industrial Relations.

Table 9.1 WIAA Region 9 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Baldwin	75,026	71,423	3,603	4.80%
Clarke	10,484	9,559	925	8.82%
Conecuh	5,079	4,647	432	8.51%
Escambia	14,394	13,317	1077	7.48%
Monroe	9,768	9,039	729	7.46%
Washington	6,920	6,259	661	9.55%
WIAA Region 9	121,671	114,244	7,427	6.10%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Baldwin	76,907	74,448	2,459	3.20%
Clarke	10,160	9,489	671	6.60%
Conecuh	5,007	4,683	324	6.47%
Escambia	14,240	13,440	800	5.62%
Monroe	9,620	9,057	563	5.85%
Washington	6,642	6,199	443	6.67%
WIAA Region 9	122,576	117,316	5,260	4.29%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **Commuting Patterns**

In 2000, about 10,700 more people commuted out of the region for work than commuted in (Table 9.2). All counties, except Clarke and Escambia, had net commuter outflows. Nearly two-thirds of the outflow was to Mobile County. There was significant commuting within the region as well.

Table 9.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 60 percent of resident workers; between 20 and 40 minutes for 27 percent; and more than 40 minutes for 10 percent. Two percent of workers take more than an hour.

The commute is less than 10 miles for 50 percent of workers and about 24 percent travel 10 to 25 miles. Nineteen percent of workers travel more than 25 miles one-way, with 5 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers so as to not slow economic development.

### **Population**

The Region 9 population estimate of 277,543 for 2004 is 5.4 percent higher than was recorded for 2000 (Figure 9.3 and Table 9.3). Only Baldwin County's population grew. The region's population is projected to rise 18.3 percent in this decade to about 311,000 by 2010.

Baldwin County will grow the fastest, but Conecuh and Monroe will manage to stay at their 2000 levels. This region needs workers for its large and growing hospitality industry. Employment growth can reduce out-commuting. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents. This strategy could reduce commuter burden on the region's roads.

**Table 9.2 WIAA Region 9 Commuting Patterns** 

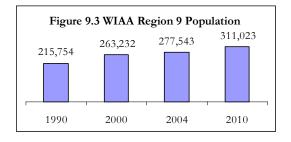
Area	Inflow, 2000			Outflow	, 2000
	Number	Percent		Number	Percent
Baldwin	6,089	49.0		16,280	70.4
Clarke	1,642	13.2		1,561	6.7
Conecuh	514	4.1		635	2.7
Escambia	2,273	18.3		1,751	7.6
Monroe	599	4.8		618	2.7
Washington	1,310	10.5		2,293	9.9
WIAA Region 9	12,427	100.0		23,138	100.0
		•		•	

Average commute time (one-way), 2004	Percent of workers
Less than 20 minutes	59.5
20 to 40 minutes	26.5
40 minutes to an hour	7.6
More than an hour	2.3
Average commute distance (one-way), 2004	Percent of workers
Less than 10 miles	50.4
10 to 25 miles	24.2
25 to 45 miles	14.2

Note: Rounding errors may be present.

More than 45 miles

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.



5.1

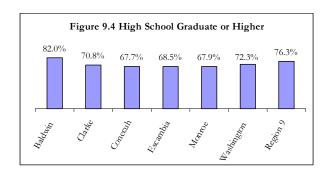
#### **Educational Attainment**

Educational attainment of Region 9 residents who are 25 years old and over is shown below in Table 9.4 and Figures 9.4 and 9.5. About 76 percent graduated from high school and 17.5 percent hold a bachelor's or higher degree. Baldwin County stands out with 82 percent high school graduates and 23 percent bachelor's or higher degree holders. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

Table 9.3 WIAA Region 9 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Baldwin	98,280	140,415	156,701	11.6	184,375	31.3
Clarke	27,240	27,867	27,422	-1.6	28,450	2.1
Conecuh	14,054	14,089	13,453	-4.5	14,133	0.3
Escambia	35,518	38,440	38,336	-0.3	40,502	5.4
Monroe	23,968	24,324	23,725	-2.5	24,424	0.4
Washington	16,694	18,097	17,906	-1.1	19,139	5.8
WIAA Region 9	215,754	263,232	277,543	5.4	311,023	18.2
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.



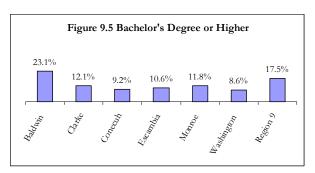


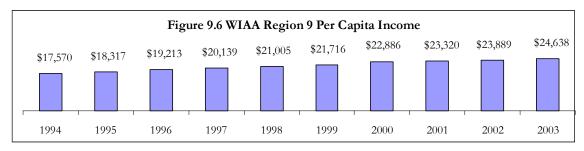
Table 9.4 Educational Attainment in 2000, Population 25 Years and Over

	Baldwin	Clarke	Conecuh	Escambia	Monroe	Washington	Region 9
Total	96,010	17,702	9,230	25,510	15,378	11,240	175,070
No schooling completed	590	209	260	366	356	193	1,974
Nursery to 4th grade	330	178	150	214	183	92	1,147
5th and 6th grade	984	565	311	676	406	350	3,292
7th and 8th grade	2,293	782	412	1,313	771	578	6,149
9th grade	2,818	696	387	1,281	632	412	6,226
10th grade	3,327	891	451	1,547	998	407	7,621
11th grade	3,229	876	452	1,316	726	590	7,189
12th grade, no diploma	3,687	968	561	1,317	867	490	7,890
High school graduate/equivalent	28,428	6,667	3,518	8,860	5,285	4,904	57,662
Some college, less than 1yr	6,458	948	570	1,843	842	601	11,262
Some college, 1+ yrs, no degree	15,998	1,939	974	2,692	1,787	1,141	24,531
Associate degree	5,722	846	333	1,392	712	513	9,518
Bachelor's degree	14,225	1,343	587	1,691	1,122	627	19,595
Master's degree	5,682	556	184	736	507	241	7,906
Professional school degree	1,553	210	59	221	110	94	2,247
Doctorate degree	686	28	21	45	74	7	861

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

### Per Capita Income

Per capita income (PCI) in Region 9 was \$24,638 in 2003 (Figure 9.6), 40 percent higher than in 1994, and \$1,867 or 7 percent less than the Alabama average of \$26,505. Baldwin County had the highest PCI with \$27,945 and was the only county whose PCI was above the state average. Washington County had the lowest PCI with \$19,157.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training,

and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 9 had an underemployment rate of 22.8 percent in 2004. Applying this rate to August 2005 labor force data means that about 26,750 employed residents were underemployed (Table 9.5). Adding the unemployed gives a total available labor pool of about 32,000 for the region. This pool is roughly six times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 14.7 percent for Baldwin County to 31.7 percent for Conecuh. Baldwin County has the largest available labor and Conecuh has the smallest.

Table 9.5 Available Labor in WIAA Region 9

	Region 9	<u>Baldwin</u>	Clarke	Conecuh	<u>Escambia</u>	Monroe	Washington
Labor Force	122,576	76,907	10,160	5,007	14,240	9,620	6,642
Employed	117,316	74,448	9,489	4,683	13,440	9,057	6,199
Underemployment rate	22.8%	14.7%	22.2%	31.7%	22.6%	20.0%	30.5%
Underemployed workers	26,748	10,944	2,107	1,485	3,037	1,811	1,891
Unemployed	5,260	2459	671	324	800	563	443
Available labor pool	32,008	13,403	2,778	1,809	3,837	2,374	2,334

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

#### **Workforce Demand**

#### **Industry Mix**

The manufacturing sector was the leading employer with nearly 15,900 jobs in the second quarter of 2004 (Table 9.6). The rest of the top five industries by employment are retail trade; health care and social assistance; accommodation and food services; and educational services. These five industries provided 53,784 jobs, 61 percent of the region total. The average monthly wage across all industries in the region was \$2,433. Two of the leading employers—manufacturing and educational services—paid more than this average. The highest average monthly wages were for wholesale trade (\$3,743), mining (\$3,698), and manufacturing (\$3,339). Accommodation and food services paid the least at \$1,210. Mining had the highest average monthly new hire wages with \$2,416, followed by wholesale trade with \$2,398. Accommodation and food services paid the least average monthly new hire wages with \$901.

By broad industry classification, service producing industries provided about 68 percent of all covered jobs in the region in second quarter 2004 (Figure 9.7). Goods producing industries were next with 26 percent and public administration had 6 percent.

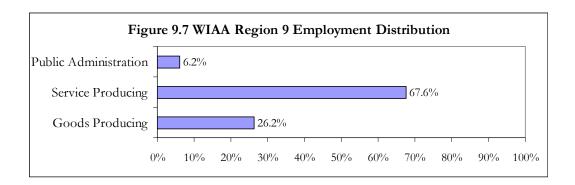


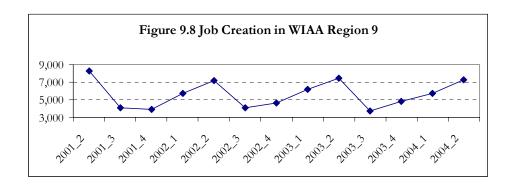
Table 9.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

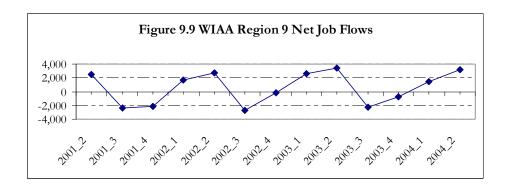
Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Average Monthly Wage	Average Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	2,121	2.40%	13	\$2,400	\$1,856
21 Mining	221	0.25%	20	\$3,698	\$2,416
22 Utilities	1,205	1.37%	17	\$3,311	\$1,827
23 Construction	4,870	5.52%	7	\$2,553	\$1,988
31-33 Manufacturing	15,898	18.02%	1	\$3,339	\$2,164
42 Wholesale Trade	3,058	3.47%	9	\$3,743	\$2,398
44-45 Retail Trade	12,647	14.34%	2	\$1,779	\$1,290
48-49 Transportation and Warehousing	3,421	3.88%	8	\$2,737	\$2,314
51 Information	1,483	1.68%	16	\$2,441	\$1,581
52 Finance and Insurance	2,374	2.69%	11	\$3,050	\$2,242
53 Real Estate and Rental and Leasing	2,041	2.31%	14	\$2,051	\$1,499
54 Professional, Scientific, and Technical Services	1,844	2.09%	15	\$2,954	\$1,957
55 Management of Companies and Enterprises	248	0.28%	19	\$2,705	\$1,905
56 Administrative and Support and Waste					
Management and Remediation Services	2,735	3.10%	10	\$1,922	\$1,427
61 Educational Services	7,810	8.85%	5	\$2,541	\$1,505
62 Health Care and Social Assistance	8,910	10.10%	3	\$2,340	\$1,637
71 Arts, Entertainment, and Recreation	1,146	1.30%	18	\$1,517	\$1,213
72 Accommodation and Food Services	8,519	9.66%	4	\$1,210	\$901
81 Other Services (except Public Administration)	2,219	2.52%	12	\$1,694	\$1,359
92 Public Administration	5,439	6.17%	6	\$2,388	\$1,529
ALL INDUSTRIES	88,209	100.00%		\$2,433	

Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### Job Creation and Net Job Flows

On average, about 5,620 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 9.8). Quarterly net job flows averaged 550 in the same period (Figure 9.9). Net job flows have ranged from a loss of 2,700 to a gain of about 3,400. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **High-Demand Occupations**

Table 9.7 shows the top 34 of about 440 occupations ranked by projected demand for jobs. Many of these occupations are common to the region's top five employment sectors: manufacturing; retail trade; health care and social assistance; accommodation and food services; and educational services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Waiters and Waitresses; Combined Food Preparation and Serving Workers; and Laborers and Freight, Stock, and Material Movers, Hand.

Table 9.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annua	Annual Average Job Openings				
Occupation	Total	Due to Growth	Due to Separations			
Cashiers	290	70	220			
Retail Salespersons	250	75	175			
Waiters and Waitresses**	235	75	160			
Combined Food Preparation and Serving Workers**	170	65	105			
Laborers and Freight, Stock, and Material Movers, Hand	105	20	85			
General and Operations Managers	85	40	45			
Office Clerks, General	85	30	55			
Maids and Housekeeping Cleaners**	85	55	30			
Truck Drivers, Heavy and Tractor-Trailer	80	25	55			
Registered Nurses**	75	45	30			
Teacher Assistants**	75	45	30			
First-Line Supervisors/Managers, Retail Sales	70	35	35			
Landscaping and Groundskeeping Workers**	65	35	30			
Nursing Aides, Orderlies, and Attendants**	65	45	20			
Janitors and Cleaners, Except Maids	65	35	30			
Bookkeeping, Accounting, and Auditing Clerks	65	30	35			
Elementary School Teachers, Except Special Education**	60	35	25			
Secretaries, Except Legal, Medical, and Executive	60	20	40			
Child Care Workers	55	25	30			
Secondary School Teachers, Except Special Education**	50	25	25			
Maintenance and Repair Workers, General	50	25	25			
Licensed Practical and Licensed Vocational Nurses**	45	25	20			
Cooks, Restaurant	45	20	25			
Sales Representatives, Except Technical and Scientific Products	40	20	20			
Receptionists and Information Clerks**	40	25	15			
Cooks, Institution and Cafeteria	40	15	25			
Security Guards**	35	20	15			
Automotive Service Technicians and Mechanics	35	15	20			
First-Line Supervisors/Managers of Office and Administrative Support Workers	35	15	20			
Customer Service Representatives	35	15	20			
Counter and Rental Clerks**	30	15	15			
First-Line Supervisors/Managers, Food Preparation	30	15	15			
Accountants and Auditors	30	15	15			
Food Preparation Workers**	30	15	15			

Note: A minimum of 30 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

### **Fast-Growing Occupations**

The 39 fastest growing occupations ranked by projected growth of employment are listed in Table 9.8. The top five fast-growing occupations are Home Health Aides; Dental Assistants; Directors, Religious Activities and Education; Counter and Rental Clerks; and Aircraft Mechanics and Service Technicians. Fourteen occupations are both high-demand and fast-growing. The five in highest demand are Waiters and Waitresses; Combined Food Preparation and Serving Workers; Maids and Housekeeping Cleaners; Registered Nurses; and Teacher Assistants.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 9.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

Tuble the defected I not drowing decupations (Be	Employment			Annual	Total Annual
Occupation	2002	2012	Percent Change	Growth (Percent)	Average Job Openings
Home Health Aides	300	520	73.3	5.65	25
Dental Assistants	170	270	58.8	4.73	15
Directors, Religious Activities and Education	190	290	52.6	4.32	10
Counter and Rental Clerks**	340	510	50.0	4.14	30
Aircraft Mechanics and Service Technicians	***	***	***	***	***
Surgeons	***	***	***	***	***
Emergency Medical Tech. and Paramedics	***	***	***	***	***
Preschool Teachers, Except Special Education	200	290	45.0	3.79	15
HelpersElectricians	70	100	42.9	3.63	10
Nursing Aides, Orderlies, and Attendants**	1,060	1,510	42.5	3.60	65
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	260	370	42.3	3.59	15
Clergy	380	540	42.1	3.58	25
Amusement and Recreation Attendants	190	270	42.1	3.58	15
Receptionists and Information Clerks**	580	810	39.7	3.40	40
Kindergarten Teachers, Except Special Education	180	250	38.9	3.34	10
Sheet Metal Workers	130	180	38.5	3.31	10
Licensed Practical and Licensed Vocational Nurses**	690	940	36.2	3.14	45
Maids and Housekeeping Cleaners**	1,530	2,080	35.9	3.12	85
Food Preparation Workers**	420	570	35.7	3.10	30
Hotel, Motel, and Resort Desk Clerks	280	380	35.7	3.10	25
Social and Human Service Assistants	280	380	35.7	3.10	15
Special Education Teachers, Preschool, Kindergarten, and Elementary School	140	190	35.7	3.10	10
Secondary School Teachers, Except Special Education**	710	960	35.2	3.06	50
Bus Drivers, School	400	540	35.0	3.05	25
Fitness Trainers and Aerobics Instructors	260	350	34.6	3.02	15
Recreation Workers	290	390	34.5	3.01	15
Elementary School Teachers, Except Special Education**	1,080	1,450	34.3	2.99	60
Teacher Assistants**	1,350	1,810	34.1	2.98	75
Middle School Teachers, Except Special Education	500	670	34.0	2.97	25
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers	150	200	33.3	2.92	10
Medical Secretaries	150	200	33.3	2.92	10
Education Administrators, Elementary and Secondary School	190	250	31.6	2.78	10
Radiologic Technologists and Technicians	160	210	31.3	2.76	10
First-Line Supervisors/Managers of Personal Service Workers	160	210	31.3	2.76	10
Landscaping and Groundskeeping Workers**	1,160	1,510	30.2	2.67	65
Combined Food Preparation and Serving Workers**	2,130	2,770	30.0	2.66	170
Registered Nurses**	1,500	1,950	30.0	2.66	75
Security Guards**	580	750	29.3	2.60	35
Waiters and Waitresses**	2,600	3,360	29.2	2.60	235

Note: Selection criterion is annual growth rate of at least 2.6 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5. \*\* Qualify as both high-demand and fast-growing occupations.

Source: Alabama Department of Industrial Relations.

### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 9.9 shows 50 selected highest earning occupations in the region. These high-earning occupations are mainly in health, legal, management, engineering, computer, and education fields. They are generally not fast-growing or high-demand. Of the top 10, four are in health, five are in management, and one is legal. One occupation, General and Operations Managers, is both high-earning and high-demand. One occupation is both high-earning and fast-growing; Education Administrators, Elementary and Secondary.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

**Table 9.9 Selected High-Earning Occupations** 

Occupation	Mean Annual Salary (\$)
Family and General Practitioners	146,370
Pediatricians, General	144,581
Podiatrists	142,667
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
Natural Sciences Managers	88,795
General and Operations Managers	85,821
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Sales Managers	78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	
ě	76,502
Financial Managers	76,003
Materials Engineers	73,382
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Computer Programmers	66,789
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
First-Line Supervisors/Managers of Non-Retail Sales Workers	63,149
Economists	62,005
Physical Therapists	61,714
Transportation, Storage, and Distribution Managers	61,630
Landscape Architects	60,965
Public Relations Managers	60,944
Broadcast News Analysts	60,944

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 9 currently has a low unemployment rate, but it also has a 32,000-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes about 26,750 underemployed workers who are willing to commute farther and longer; 54 percent are prepared for 20 or more minutes longer and 50 percent for 20 or more extra miles.

Low wages at the available jobs, lack of job opportunities in their areas, and living too far from jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also frequently cited. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is currently growing faster than the labor force. Higher employment demand could reduce commuter outflow, but also presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is expected to be faster than the state's rate through 2010, mainly because of Baldwin County. Another strategy to expand the labor force to meet possible increases in employment demand is to raise labor force participation by focusing on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 9.10 shows the percentage of selected occupations in WIAA Region 9 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 9.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The region's high-demand and high-growth occupations are dominated by those for which the most relevant skills are active listening, reading comprehension, speaking, writing, and service orientation.

Table 9.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	•	•	•
Active Learning	35%	33%	70%
Active Listening	85%	85%	84%
Critical Thinking	59%	56%	92%
Learning Strategies	35%	38%	14%
Mathematics	29%	15%	34%
Monitoring	44%	41%	32%
Reading Comprehension	79%	85%	96%
Science	0%	3%	32%
Speaking	74%	85%	68%
Writing	38%	49%	42%
Complex Problem Solving Skills			
Complex Problem Solving	3%	3%	46%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	3%	0%	4%
Management of Personnel Resources	12%	10%	14%
Time Management	53%	54%	56%
Social Skills			
Coordination	32%	38%	36%
Instructing	41%	64%	24%
Negotiation	6%	0%	16%
Persuasion	6%	0%	16%
Service Orientation	41%	46%	12%
Social Perceptiveness	53%	67%	16%
Systems Skills			
Judgment and Decision Making	18%	18%	66%
Systems Analysis	0%	0%	14%
Systems Evaluation	3%	3%	18%
Technical Skills	4.707		20.4
Equipment Maintenance	12%	13%	0%
Equipment Selection	12%	15%	8%
Installation	9%	10%	0%
Operation and Control	6%	5%	0%
Operation Monitoring	6%	8%	0%
Operations Analysis	0%	0%	20%
Programming	0%	0%	6%
Quality Control Analysis	0%	3%	4%
Repairing	9%	5%	0%
Technology Design	0%	0%	14%
Troubleshooting	9%	8%	14%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

### **Education and Training Issues**

Educational attainment in WIAA Region 9 is somewhat comparable to that of the state. Seventy-six percent of residents age 25 and over have graduated from high school and 17.5 percent have a bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. Baldwin County stands out with 82 percent high school graduates and 23 percent bachelor's or higher degree holders. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 9.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand jobs do not require postsecondary training; some form of on-the-job training is the minimum requirement. About 25 percent of fast-growing occupations require a bachelor's or higher degree. The challenge for the region is that future high-demand jobs are likely to require some postsecondary education and training.

Table 9.11 Number of Selected Occupations with Most Common Education/Training Requirement

Most Common Education/Training Requirements Categories	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
First Professional Degree		2	9
Doctoral Degree			1
Master's Degree			4
Work Experience Plus a Bachelor's or Higher Degree	1	1	14
Bachelor's Degree	3	7	17
Associate Degree	1	2	
Postsecondary Vocational Training	2	6	
Work Experience in a Related Occupation	3	2	3
Long-term On-the-job Training	1	1	1
Moderate On-the-job Training	7	3	1
Short-term On-the-job Training	16	15	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires one to 12 months on-the-job experience and informal training. **Short-term** requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 9.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more

high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

### Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the July 2005 Annual Report of the Region 9 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

The highest growth sectors are retail and hospitality, followed closely by construction. The first two need a ready pool of workers with good interpersonal skills and attitude, the willingness to come to work every day, and the ability to afford to live on the wages paid by those sectors. Construction workers on major projects are often imported from other parts of the country specifically for each project; encouraging those workers to stay here is one route to solving the construction labor shortage. Another is to continue and expand the program piloted last year as a joint venture between Faulkner State Community College, the CareerLink centers, DHR, and Baldwin schools to provide basic carpentry and workplace safety skills to unskilled workers.

Action issue 2. How can/should worker skills be generally upgraded in the region?

It is not very difficult to identify needs in specific industry sectors—for example: nursing, aircraft mechanics, IT, machinists—and to develop specific partnerships and training programs to address these. It is more difficult to instill a work ethic and a good work attitude in people who perhaps grew up in an environment that did not emphasize this. FIT gets at some of this, but people need a strong incentive to actually commit the time it takes to get through this. Faulkner State CC has a great remediation program but not enough people who should be in it sign up or stay in it.

Action issue 3. How can future workers be helped to make better choices about career preparation (high school, youth/young adults age 18-26, adults, dislocated workers)?

This advisory council felt very strongly that we are not doing all that we should be doing in this regard in the K-12 system, that there is a disconnect between K-12 and business. Counseling on what you do after high school needs to be an industry-led activity. We need to find ways to be present in our middle schools and high schools as business people. Junior Achievement, Career Technology Advisory Councils, FBLA, and DECA are traditional routes to this. We need to be proactive with our school system superintendents and staff to find other ways.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

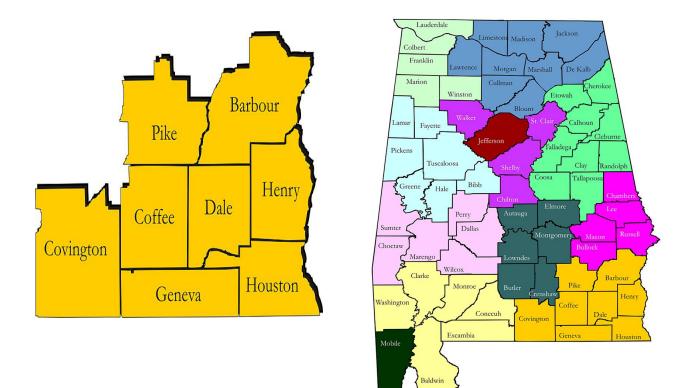
Reaction of employers in the region is generally positive toward the concept of pre-service credentialing. If a job applicant were to show up with a certificate in hand and willingness to work, they'd be happy to hire him or her! The carpentry skills pilot program seemed to work well, but they did not believe that most of the applicants that they had been rejecting would actually go to pre-service training, at least for entry or general labor types of positions in this region. On the other hand, in-service incumbent worker training has been very well received and is broadly used for training in lean manufacturing or quality certifications. Employers who have used this enthusiastically endorse continuing the program and working to let more companies know about it.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

It has also become apparent that DHR can be a very good partner in workforce recruiting and retention. DHR has access to funds that can be used to help some applicants and/or employees get to and from work, find child- or adult-care facilities, and so forth.

Other Regional Workforce Development Problems, Issues and Concerns. Because of the huge demand for workers in hospitality and retail sectors coming from the growth discussed above, we need to find a way to partner and recruit workers for these segments as well as for industrial sector general laborer jobs from outside of our region, or perhaps from outside of our state. This implies that we also need to have a plan for affordable housing and mass transit. Envision Coastal Alabama is currently working on some of this for Mobile, Baldwin, and Escambia counties, but we do not have a process to plan with all Region 9 counties involved.

# **WIAA Region 10 Workforce Report**



# **Summary**

- Region 10 had a 3.9 percent unemployment rate in August 2005, with 5,840 unemployed. However, the eight-county region has a 37,700-strong available labor pool that is looking for better jobs and includes about 31,860 underemployed workers. The underemployed are willing to commute farther and longer; for the one-way commute, 63 percent are prepared for 20 or more minutes longer and 55 percent will go 20 or more extra miles.
- In 2000, about 8,320 residents commuted out of the region for work, compared to 9,280 incommuters. Barbour, Dale, Geneva, and Houston counties had net commuter inflows. Significant commuting within the region suggests that the roads and highways must be maintained properly to ensure uninterrupted movement of workers as impeded movement of workers can slow economic development.
- Educational attainment in the region is lower than for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to 72 percent and 15 percent, respectively, for the region. Coffee, Dale, and Houston counties have the highest educational attainment levels.

- Employment is currently growing faster than the labor force. More jobs might reduce commuter outflow, but also presents a challenge to workforce development. Initiatives addressing this challenge should consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) facilitating in-commuting, and (iii) helping communities gain new residents. Increasing population is generally more beneficial to communities than in-commuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work, but are potential labor force participants. Investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource.
- By sector, the top five employers in the region are manufacturing; health care and social assistance; retail trade; educational services; and accommodation and food services. These five industries provided 76,620 jobs, 64 percent of the region total in the second quarter of 2004. Three of the leading employers—manufacturing, health care and social assistance, and educational services—had higher average monthly wages than the \$2,340 regional average.
- On average about 6,400 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 640. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Fifteen occupations are both high-demand and fast-growing and include Registered Nurses;
   Aircraft Mechanics and Service Technicians; and General and Operations Managers. The top
   five high-demand occupations are Cashiers; Retail Salespersons; Waiters and Waitresses;
   Combined Food Preparation and Serving Workers; and Truck Drivers, Heavy and Tractor Trailer. The top five fast-growing occupations are Medical Assistants; Dental Assistants; Home
   Health Aides; Medical and Health Services Managers; and Production, Planning, and Expediting
   Clerks.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and education fields. Of the top 10 high-earning occupations, six are in health, three are in management, and one is legal. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 39 selected high-demand, 17 selected fast-growing, and 50 selected high-earning occupations, only one high earning occupation, General and Operations Managers, is in the high-demand category. Just two occupations—Pharmacists and Medical and Health Services Managers—are both high-earning and fast-growing.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the region's economy by retaining, expanding, and attracting more high-wage providing industries.

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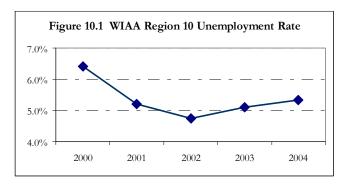
- The finding that basic skills are important—for high-demand, high-growth, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising. This emphasizes the need to raise educational attainment in the region and presents challenges to workforce development. It also presents opportunities for economic development through workforce development activities that involve postsecondary and higher education institutions. Higher incomes to graduates from these institutions would help to raise personal income for the region. Raising personal income by improving educational attainment for a region that has a large number of low wage jobs is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

## **Workforce Supply**

### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students, retirees, and the disabled). Table 10.1 shows labor force information for Region 10 and its eight counties for 2004 and August 2005. Larger increases in the number of employed residents relative to labor force size lowered unemployment in 2005 for the region and its counties. The labor force grew in Geneva, Henry, and Houston counties; Pike and Covington counties' number of employed fell.

Unemployment rates for the counties ranged from 4.6 percent to 7.2 percent in 2004, with 5.3 percent for the region. In August 2005, the range was 3.4 percent to 5.6 percent, with 3.9 percent for the region. Unemployment rates in the region fell to 4.7 percent in 2002 and rose to 5.3 percent in 2004, but have been falling since (Figure 10.1). Employment, the number of full-time and part-time jobs, averaged 118,660 quarterly from the second quarter of 2001 to third quarter 2004 and has been recovering since 2003 (Figure 10.2).

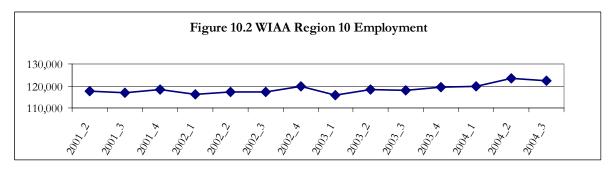


Source: Alabama Department of Industrial Relations.

Table 10.1 WIAA Region 10 Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Barbour	10,623	9,858	765	7.20%
Coffee	20,173	19,111	1062	5.26%
Covington	17,262	16,130	1132	6.56%
Dale	20,796	19,682	1114	5.36%
Geneva	11,892	11,317	575	4.84%
Henry	7,653	7,231	422	5.51%
Houston	46,062	43,966	2096	4.55%
Pike	15,143	14,341	802	5.30%
WIAA Region 10	149,604	141,636	7,968	5.33%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Barbour	10,499	9,909	590	5.62%
Coffee	19,952	19,217	735	3.68%
Covington	16,823	16,123	700	4.16%
Dale	20,672	19,791	881	4.26%
Geneva	12,114	11,690	424	3.50%
Henry	7,786	7,469	317	4.07%
Houston	47,010	45,417	1,593	3.39%
Pike	14,513	13,914	599	4.13%
WIAA Region 10	149,369	143,530	5,839	3.91%
Alabama	2,155,745	2,065,528	90,217	4.18%
Alaballia	4,133,743	2,003,320	JU,211	T.10/0

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **Commuting Patterns**

The region had a net inflow of 960 commuters in 2000 (Table 10.2). Barbour, Dale, Geneva, and Houston counties had net commuter inflows; Barbour County with 931 netted the most. There was significant commuting within the region as well.

Table 10.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 66.5 percent of resident workers; between 20 and 40 minutes for 21.4 percent; and more than 40 minutes for 8.6 percent. Those who take more than an hour to work make up 2.6 percent of workers.

The commute is less than 10 miles for 55 percent of workers and about 26 percent travel 10 to 25 miles. Almost 15 percent of workers travel more than 25 miles one-way, with 5 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers and not slow economic development.

## **Population**

The Region 10 population estimate of 324,236 for 2004 is 1.4 percent higher than was recorded for 2000 (Figure 10.3 and Table 10.3). Four counties lost some residents. The region's population is projected to rise 5.5 percent in this decade to about 337,600 by 2010.

Barbour County will grow the fastest and Covington will experience the slowest growth. Faster employment growth can intensify in-commuting. Communities that experience rapid job gains should invest in amenities and infrastructure to attract new residents. Increasing the population will help to expand the labor

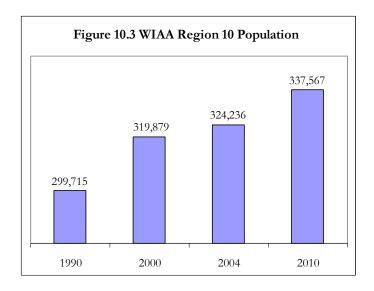
Table 10.2 WIAA Region 10 Commuting Patterns

Area	Inflow, 2000			Outflow	, 2000
	Number	Percent		Number	Percent
Barbour	1,816	19.6		885	10.6
Coffee	458	4.9		573	6.9
Covington	1,202	13.0		1,796	21.6
Dale	814	8.8		593	7.1
Geneva	795	8.6		679	8.2
Henry	187	2.0		374	4.5
Houston	2,696	29.1		1,812	21.8
Pike	1,312	14.1		1,608	19.3
WIAA Region 10	9,280	100.0		8,320	100.0

Average commute time (one-way), 2004	Percent of workers
Less than 20 minutes	66.5
20 to 40 minutes	21.4
40 minutes to an hour	6.0
More than an hour	2.6
Average commute distance (one-way), 2004	Percent of workers
Less than 10 miles	55.2
10 to 25 miles	26.3
25 to 45 miles	9.6
More than 45 miles	4.9

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.



force and could reduce commuter burden on the region's roads.

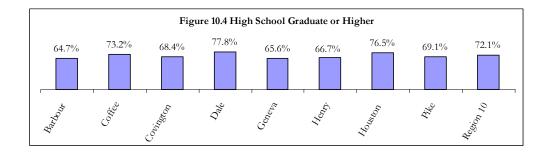
Table 10.3 WIAA Region 10 Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Barbour	25,417	29,038	28,557	-1.7	31,871	9.8
Coffee	40,240	43,615	45,041	3.3	46,526	6.7
Covington	36,478	37,631	36,875	-2.0	38,150	1.4
Dale	49,633	49,129	49,122	0.0	50,561	2.9
Geneva	23,647	25,764	25,599	-0.6	27,411	6.4
Henry	15,374	16,310	16,699	2.4	16,977	4.1
Houston	81,331	88,787	92,947	4.7	94,214	6.1
Pike	27,595	29,605	29,396	-0.7	31,857	7.6
WIAA Region 10	299,715	319,879	324,236	1.4	337,567	5.5
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

Educational attainment of Region 10 residents who are 25 years old and over is shown below in Table 10.4 and Figures 10.4 and 10.5. About 72 percent graduated from high school and 15 percent hold a bachelor's or higher degree. Coffee, Dale, and Houston counties have the highest educational attainment levels. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.



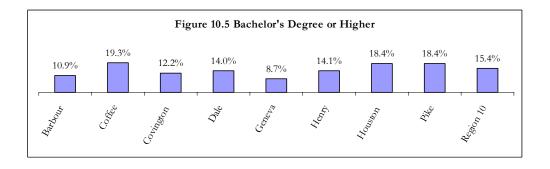


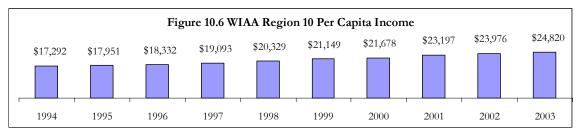
Table 10.4 Educational Attainment in 2000, Population 25 Years and Over

	Barbour	Coffee	Covington	Dale	Geneva	Henry	Houston	Pike	Region 10
Total	18,896	28,885	25,705	31,390	17,588	10,967	58,671	17,703	209,805
No schooling completed	476	494	477	312	342	228	893	271	3,493
Nursery to 4th grade	289	290	394	310	226	162	438	200	2,309
5th and 6th grade	573	670	869	593	717	308	1,065	640	5,435
7th and 8th grade	1,104	1,474	1,734	1,178	1,049	639	2,501	984	10,663
9th grade	1,002	1,299	1,287	965	1,026	586	1,972	836	8,973
10th grade	1,046	1,091	1,442	1,345	1,116	637	2,256	928	9,861
11th grade	1,061	1,397	1,027	1,207	660	594	2,518	847	9,311
12th grade, no diploma	1,128	1,040	885	1,066	910	500	2,128	766	8,423
High school graduate/equivalent	6,124	7,571	8,473	9,159	5,626	3,192	17,809	5,312	63,266
Some college, less than 1yr	1,196	2,044	1,756	2,718	1,287	754	4,370	912	15,037
Some college, 1+ yrs, no degree	1,939	3,972	2,665	5,527	2,072	1,262	8,270	2,172	27,879
Associate degree	890	1,969	1,554	2,612	1,031	560	3,634	571	12,821
Bachelor's degree	1,362	3,562	2,005	3,013	979	1,017	7,114	2,018	21,070
Master's degree	540	1,572	788	1,082	447	434	2,440	959	8,262
Professional school degree	142	308	300	239	72	84	939	200	2,284
Doctorate degree	24	132	49	64	28	10	324	87	718

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

### Per Capita Income

Per capita income (PCI) in Region 10 was \$24,820 in 2003 (Figure 10.6), 44 percent higher than in 1994, and \$1,685 or 6 percent less than the Alabama average of \$26,505. Houston County had the highest PCI with \$27,702, followed by Coffee with \$26,837. Just these two counties had PCIs above the state average. Barbour County had the lowest PCI with \$20,889.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment

because current workers are potential employees. In fact, experience requirements in job ads are evidence that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

WIAA Region 10 had an underemployment rate of 22.2 percent in 2004. Applying this rate to August 2005 labor force data means that about 31,860 employed residents were underemployed (Table 10.5). Adding the unemployed gives a total available labor pool of about 37,700 for the region. This pool is 6.5 times the number of unemployed and is a more realistic measure of the available labor in the region. However, prospective employers must be prepared to offer the underemployed higher wages, better terms of employment, or some other incentives to induce them to change jobs. Underemployment ranged from 18.2 percent for Coffee County to 28.1 percent for Henry. Houston County has the largest available labor and Henry has the smallest.

Table 10.5 Available Labor in WIAA Region 10

	Region 10	<u>Barbour</u>	Coffee	Covington	<u>Dale</u>	Geneva	<u>Henry</u>	<u>Houston</u>	<u>Pike</u>
Labor Force	149,369	10,499	19,952	16,823	20,672	12,114	7,786	47,010	14,513
Employed	143,530	9,909	19,217	16,123	19,791	11,690	7,469	45,417	13,914
Underemployment rate	22.2%	23.5%	18.2%	20.3%	23.4%	19.4%	28.1%	19.2%	25.4%
Underemployed workers	31,864	2,329	3,497	3,273	4,631	2,268	2,099	8,720	3,534
Unemployed	5,839	590	735	700	881	424	317	1,593	599
Available labor pool	37,703	2,919	4,232	3,973	5,512	2,692	2,416	10,313	4,133

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates. Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

### Workforce Demand

### **Industry Mix**

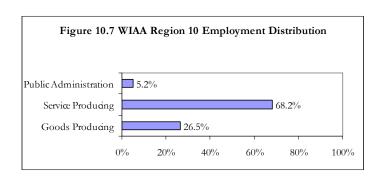
The manufacturing sector was the leading employer with 24,331 jobs in the second quarter of 2004 (Table 10.6). The rest of the top five industries by employment are health care and social assistance; retail trade; educational services; and accommodation and food services. These five industries provided 76,620 jobs, 64 percent of the region total. The average monthly wage across all industries in the region was \$2,340. Three of the leading employers—manufacturing, health care and social assistance, and educational services—paid more than this average. The highest average monthly wages were for utilities (\$4,667), mining (\$3,201), and transportation and warehousing (\$2,991). Accommodation and food services paid the least at \$1,030. Utilities also had the highest average monthly new hire wages with \$2,267. Arts, entertainment, and recreation paid the least average monthly new hire wages with \$670.

Table 10.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

	T . 1			Average	Average
Industry by 2-digit NAICS Code	Total Employment	Share	Rank	Monthly Wage	Monthly New Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting				Ü	
	1,529	1.27%	17	\$2,157	\$1,867
21 Mining	117	0.10%	20	\$3,201	\$2,083
22 Utilities	2,061	1.71%	14	\$4,667	\$2,670
23 Construction	5,940	4.94%	7	\$2,492	\$2,084
31-33 Manufacturing	24,331	20.22%	1	\$2,532	\$1,994
42 Wholesale Trade	4,765	3.96%	9	\$2,927	\$2,267
44-45 Retail Trade	16,056	13.35%	3	\$1,841	\$1,270
48-49 Transportation and Warehousing	5,621	4.67%	8	\$2,991	\$2,234
51 Information	1,720	1.43%	15	\$2,816	\$1,920
52 Finance and Insurance	2,819	2.34%	12	\$2,938	\$1,981
53 Real Estate and Rental and Leasing	1,655	1.38%	16	\$1,962	\$1,282
54 Professional, Scientific, and Technical Services	2,889	2.40%	11	\$2,783	\$1,814
55 Management of Companies and Enterprises	660	0.55%	19	\$2,303	\$1,129
56 Administrative and Support and Waste					
Management and Remediation Services	4,182	3.48%	10	\$1,690	\$1,265
61 Educational Services	10,432	8.67%	4	\$2,595	\$1,545
62 Health Care and Social Assistance	16,472	13.69%	2	\$2,578	\$1,863
71 Arts, Entertainment, and Recreation	755	0.63%	18	\$1,055	\$670
72 Accommodation and Food Services	9,329	7.75%	5	\$1,030	\$722
81 Other Services (except Public Administration)	2,665	2.22%	13	\$1,795	\$1,348
92 Public Administration	6,307	5.24%	6	\$2,183	\$1,232
ALL INDUSTRIES	120,305	100.00%		\$2,340	

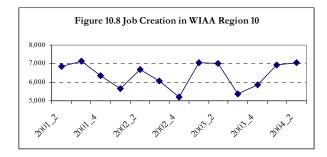
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

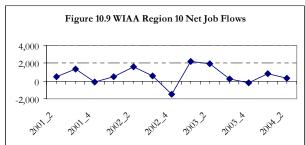
By broad industry classification, service producing industries provided about 68 percent of all covered jobs in the region in second quarter 2004 (Figure 10.7). Goods producing industries were next with 27 percent and public administration had 5 percent.



### Job Creation and Net Job Flows

On average, about 6,400 jobs were created per quarter from second quarter 2001 to second quarter 2004 (Figure 10.8). Average quarterly net job flows was 640 in the same period (Figure 10.9). Net job flows have ranged from a loss of 1,500 to a gain of about 2,200. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **High-Demand Occupations**

Table 10.7 shows the top 34 of about 440 occupations ranked by projected demand for jobs. Many of these occupations are common to the region's top five employment sectors: manufacturing; health care and social assistance; retail trade; educational services; and accommodation and food services. Thus these sectors will continue to dominate employment in the region. The top five high-demand occupations are Cashiers; Retail Salespersons; Waiters and Waitresses; Combined Food Preparation and Serving Workers; and Truck Drivers, Heavy and Tractor-Trailer.

Table 10.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annua	al Average Job	Openings
Occupation	Total	Due to Growth	Due to Separations
Cashiers	240	35	205
Retail Salespersons	195	40	155
Waiters and Waitresses	155	30	125
Combined Food Preparation and Serving Workers**	145	40	105
Truck Drivers, Heavy and Tractor-Trailer	100	45	55
Registered Nurses**	90	40	50
Aircraft Mechanics and Service Technicians**	***	***	***
General and Operations Managers**	80	25	55
Office Clerks, General	75	15	60
Meat, Poultry, and Fish Cutters and Trimmers**	70	30	40
First-Line Supervisors/Managers, Retail Sales	65	25	40
Nursing Aides, Orderlies, and Attendants**	60	30	30
Janitors and Cleaners, Except Maids	55	20	35
Licensed Practical and Licensed Vocational Nurses**	55	20	35
Bookkeeping, Accounting, and Auditing Clerks	50	5	45
Teacher Assistants	50	20	30
Sales Representatives, Except Technical and Scientific Products	45	15	30
Maids and Housekeeping Cleaners**	45	20	25
Child Care Workers	40	10	30
Maintenance and Repair Workers, General	40	15	25
Elementary School Teachers, Except Special Education	40	15	25
Automotive Service Technicians and Mechanics	40	10	30
Counter and Rental Clerks**	40	15	25
Receptionists and Information Clerks**	35	15	20
Team Assemblers	35	0	35
First-Line Supervisors/Managers of Office and Administrative Support Workers	35	5	30
Security Guards**	35	15	20
Production, Planning, and Expediting Clerks**	***	***	***
Food Preparation Workers**	30	10	20
Cooks, Institution and Cafeteria	30	5	25
Tellers	30	5	25
Secondary School Teachers, Except Special Education	30	10	20
First-Line Supervisors/Managers of Production and Operating Workers	30	5	25
Landscaping and Groundskeeping Workers	30	10	20
Cooks, Restaurant	25	5	20
Police and Sheriff's Patrol Officers	25	5	20
Welders, Cutters, Solderers, and Brazers**	25	10	15
Truck Drivers, Light or Delivery Services	25	15	10
Customer Service Representatives**	25	10	15

Note: A minimum of 25 average annual job openings is used as selection criterion and data are rounded to nearest 5.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

\*\*\* The data for these occupations are confidential using Bureau of Labor Statistics standards. Source: Alabama Department of Industrial Relations.

### **Fast-Growing Occupations**

The 17 fastest growing occupations ranked by projected growth of employment are listed in Table 10.8. The top five fast-growing occupations are Medical Assistants; Dental Assistants; Home Health Aides; Medical and Health Services Managers; and Production, Planning, and Expediting Clerks. Fifteen occupations are both high-demand and fast-growing, six of which are Registered Nurses; Aircraft Mechanics and Service Technicians; Licensed Practical & Licensed Vocational Nurses; Welders, Cutters, Solderers, and Brazers; Production, Planning, and Expediting Clerks; and General and Operations Managers.

Table 10.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Emplo	yment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Medical Assistants	270	400	48.1	4.01	20
Dental Assistants	230	310	34.8	3.03	10
Home Health Aides	260	340	30.8	2.72	15
Medical and Health Services Managers	210	270	28.6	2.54	10
Production, Planning, and Expediting Clerks**	***	***	***	***	***
Counter and Rental Clerks**	670	840	25.4	2.29	40
Bill and Account Collectors	280	350	25.0	2.26	15
Pharmacists	290	360	24.1	2.19	10
Medical Records and Health Information Technicians	170	210	23.5	2.14	10
Welders, Cutters, Solderers, and Brazers**	510	630	23.5	2.14	25
Preschool Teachers, Except Special Education	270	330	22.2	2.03	10
Aircraft Mechanics and Service Technicians**	***	***	***	***	***
Medical Transcriptionists	140	170	21.4	1.96	10
Receptionists and Information Clerks**	710	860	21.1	1.94	35
Security Guards**	720	870	20.8	1.91	35
Pharmacy Technicians	250	300	20.0	1.84	10
Personal and Home Care Aides	200	240	20.0	1.84	10

Note: Selection criterion is annual growth rate of at least 1.8 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table 10.9 shows 50 selected highest earning occupations in the region. These high-earning occupations are mainly in health, legal, management, engineering, computer, and education fields. They are generally not fast-growing or high-demand. Of the top 10, six are in health, three are in management, and one is legal. One occupation, General and Operations Managers, is both high-earning and high-demand. Just two occupations—Pharmacists and Medical and Health Services Managers—are both high-earning and fast-growing.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table 10.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Surgeons	180,856
Obstetricians and Gynecologists	176,010
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
Natural Sciences Managers	88,795
General and Operations Managers	85,821
Aerospace Engineers	84,344
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Sales Managers	78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Chemical Engineers	76,500 76,502
Financial Managers	
· ·	76,003
Airline Pilots, Copilots, and Flight Engineers Medical and Health Services Managers	74,870
· ·	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Education Administrators, Elementary and Secondary School	64,480
Commercial Pilots	64,020
Architects, Except Landscape and Naval	63,627
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190
Business Teachers, Postsecondary	63,170
Economists	62,005
Physical Therapists	61,714

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

#### Other Workforce Issues

#### Available Labor

The availability of labor is critical to economic development. WIAA Region 10 currently has a low unemployment rate, but it also has a 37,700-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes about 31,860 underemployed workers who are willing to commute farther and longer; 63 percent are prepared for 20 or more minutes longer and 55 percent for 20 or more extra miles.

Lack of job opportunities in their areas, low wages at the available jobs, and living too far from jobs are the primary reasons given for being underemployed. Retirement and disability are the primary reasons given for not working, but a lack of job opportunities is also cited often. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is currently growing faster than the labor force. Higher employment demand could intensify commuter inflow, but also presents communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The region's population growth rate is lower than the state's rate. Another strategy to expand the labor force to meet possible increases in employment demand is to raise labor force participation by focusing on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some low earning occupations have no minimum skill set requirements (e.g. dishwashers and maids).

Table 10.10 shows the percentage of selected occupations in WIAA Region 10 that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance. Thus primary skills are more important than other skills. It is important to note that a particular skill may be more important and more extensively used in one occupation than another. Table 10.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science and critical thinking skills are primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for complex problem solving, resource management, and systems skills; these skills require longer training periods and postsecondary education. The region's high-demand and high-growth occupations are dominated by those for which the most relevant skills are active listening, reading comprehension, speaking, writing, and service orientation.

Table 10.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	<u>-</u>		_
Active Learning	28%	47%	70%
Active Listening	69%	82%	84%
Critical Thinking	51%	47%	92%
Learning Strategies	28%	24%	14%
Mathematics	31%	35%	30%
Monitoring	36%	41%	40%
Reading Comprehension	69%	88%	96%
Science	0%	6%	36%
Speaking	64%	82%	66%
Writing	33%	65%	40%
Complex Problem Solving Skills			
Complex Problem Solving	5%	6%	38%
Resource Management Skills			
Management of Financial Resources	3%	0%	12%
Management of Material Resources	8%	6%	2%
Management of Personnel Resources	10%	0%	16%
Time Management	44%	65%	52%
Social Skills			
Coordination	31%	29%	36%
Instructing	33%	41%	26%
Negotiation	5%	0%	18%
Persuasion	5%	0%	16%
Service Orientation	36%	35%	12%
Social Perceptiveness	44%	59%	14%
Systems Skills			
Judgment and Decision Making	15%	24%	70%
Systems Analysis	0%	0%	12%
Systems Evaluation	0%	0%	28%
Technical Skills			
Equipment Maintenance	15%	18%	0%
Equipment Selection	13%	18%	6%
Installation	10%	12%	0%
Operation and Control	8%	6%	6%
Operation Monitoring	10%	12%	4%
Operations Analysis	0%	0%	20%
Programming	0%	0%	4%
Quality Control Analysis	5%	12%	4%
Repairing	13%	12%	0%
Technology Design	0%	0%	10%
Troubleshooting	10%	6%	12%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

### **Education and Training Issues**

Educational attainment in WIAA Region 10 is lower than that of the state. Seventy-two percent of residents age 25 and over have graduated from high school and 15.4 percent have a bachelor's or higher degree, compared to 75 percent and 19 percent, respectively, for Alabama. Coffee, Dale, and Houston counties have the highest educational attainment levels. Education and skill requirements for jobs keep rising and emphasize a very strong need to raise educational attainment in the region.

Table 10.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations typically require a bachelor's or higher degree. Most of the high-demand and fast-growing jobs do not require postsecondary training; some form of on-the-job training is the minimum requirement. The challenge for the region is that future high-demand jobs are likely to require some postsecondary education and training.

Table 10.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree		1	11
Doctoral Degree			1
Master's Degree			4
Work Experience Plus a Bachelor's or Higher Degree	1	1	13
Bachelor's Degree	2		18
Associate Degree	1	1	
Postsecondary Vocational Training	3	3	1
Work Experience in a Related Occupation	3		1
Long-term On-the-job Training	3	1	
Moderate On-the-job Training	7	3	1
Short-term On-the-job Training	19	7	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. **Long-term** requires more than 12 months on-the-job training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. **Moderate-term** requires 1 to 12 months on-the-job experience and informal training. **Short-term** requires up to 1 month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table 10.10) indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the region's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher

educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the region. Raising personal income by improving educational attainment and technological skills is an effective economic development strategy, especially for a region with a low population growth rate, lower educational attainment, and a large number of low wage jobs.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified regional economy. Indeed, one cannot achieve success without the other.

### Regional Advisory Council Annual Report: Implications for Action

The material in this section is from the 2005 Annual Report of the Region 10 Workforce Development Regional Advisory Council. It does not necessarily reflect the opinions of the direct contributors to this workforce report.

Action issue 1. Where must education and training opportunities be advanced or marketed to meet the demands of critical skills/worker shortages and high-growth occupations in the region?

The two sources having the greatest impact on one's educational development are the home and grades K-12 school. Parental obligations to advise and council children are being neglected or ignored particularly in families with lower incomes. Parental education has not been successful toward promoting career technical education. However, several successful Career Technical Education programs have been recently established in various school systems in the region that have created basic curriculums that support existing industry needs. School counselors have a critical responsibility to inform students of opportunities in skilled, high-wage jobs. Most high school counselors are not aware of or do not promote these opportunities. The universal applications of the WorkKeys skill assessment will help students evaluate their skill level and job placement potential and should be adopted throughout the region.

Action issue 2. How can/should worker skills be generally upgraded in the region?

Skill upgrades in the region can be accomplished using several strategies:

- 1. Industry involvement by guaranteeing a job to individuals who complete skills training. This could be a contract between student and industry and could also involve on the job part-time and apprenticeship training.
- 2. Scholarships offered by the private or the public sector available to students or adults willing to complete training in high-demand, high-skill careers.
- 3. Incumbent worker programs and Focused Industry Training (FIT) programs have been successful in the area and should be expanded by the state Office of Workforce Development.
- 4. A public service marketing campaign needs to be created to educate potential participants concerning the benefits of high-wage, high-skill job opportunities.

5. Adult literacy programs should be better promoted by business and the public. Over 25 percent of adults in Region 10 are functionally illiterate.

Action issue 3. How can future workers be helped to make better choices about career preparation (high school, youth/young adults age 18-26, adults, dislocated workers)?

There is an obvious need for parents, high school counselors and teachers to be better informed concerning job opportunities for career technical education. The economy, technology, job skills, and opportunities for technical and specialized training have evolved very fast, resulting in many uninformed parents and educators. Programs that educate these individuals to job opportunities are needed. High school dropouts and young adults form an untapped resource of potential skilled workers. Many workers, underemployed for several years, have families and have matured in their outlook and work ethic. This represents a potential target for skilled-job training. Outreach programs that include churches, retail establishments, and the media could be developed to reach this class of individuals.

Action issue 4. Should worker assessment and credentialing be increased in the region (pre-service and in-service training)?

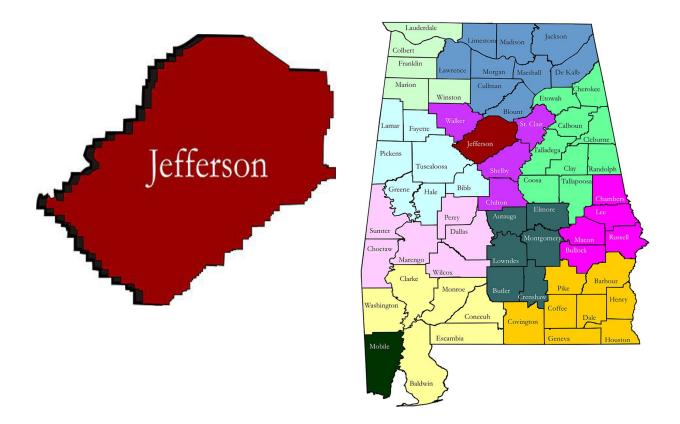
Yes, there is a clear need for this type of effort in Region 10. The Alabama Works program was a successful effort in the area as well as Incumbent Worker Training and some of the ongoing career technical education programs. WorkKeys assessment, which has also been adopted by some of the area colleges, has been a successful method of assessing skills. However, it has not been well funded or universally applied.

Other Action Issues? There is a clear need for better cooperation between public workforce development programs, business and industry, and the public schools. In every Region 10 discussion, this issue was discussed. Regional workforce efforts should be pursued and a formal regional structure be empowered to ensure cooperation on a regional level.

Action issue 5. What roles should be played by the various stakeholder groups (employers, partner agencies, elected officials, faith-based/community-based organizations, Workforce Investment Board members, grantor agencies, news media, vendors/contractors) at the local, regional, state and federal levels in implementing the action steps outlined above?

A regional structure should be formally established and recognized by the State of Alabama as well as the U.S. Department of Labor. This structure will ensure that stakeholders are coordinated in their efforts to improve the workforce and that funds are prioritized by stakeholders.

# Jefferson County LWIA Workforce Report



# **Summary**

- Jefferson County had a 4.6 percent unemployment rate in August 2005, with about 15,100 unemployed. However, the county has a large 85,900-strong available labor pool that is looking for better jobs and includes 70,800 underemployed workers. The underemployed are willing to commute farther and longer. For the one-way commute, 43 percent are prepared for 20 or more minutes longer and 45 percent will go 20 or more extra miles.
- In 2000, 89,400 commuted into the county for work, compared to 26,800 residents who worked outside the county. Each of the neighboring counties provided at least 1,600 in-commuters. About 50,000 in-commuters lived in two counties; Shelby and St. Clair. The high level of commuting suggests that roads and highways must be maintained properly to ensure uninterrupted movement of workers and not slow economic development.
- The county's educational attainment is much higher than for the state. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to about 81 percent and 25 percent, respectively, for the county.

- Employment is currently growing faster than the labor force and population. This will intensify commuter inflow and worsen traffic congestion. Workforce development initiatives that tackle this challenge might consider (i) focusing on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) helping communities gain new residents, and (iii) facilitating incommuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work. They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource. Increasing the number of residents is generally more beneficial to communities than incommuting. However, communities must be prepared to invest in amenities and infrastructure to support population growth. Facilitating in-commuting should be a short-term strategy.
- By sector, the top five employers in the county are health care and social assistance, retail trade, manufacturing, finance and insurance, and accommodation and food services. These five industries provided 188,551 jobs, about half of the county total in the second quarter of 2004. Three of these leading employers—finance and insurance, manufacturing, and health care and social assistance—had average monthly wages that were above the \$3,107 countywide average.
- On average about 18,100 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged 544. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Three occupations are both high-demand and fast-growing: Home Health Aides; Security Guards; and Licensed Practical and Licensed Vocational Nurses. The top five high-demand occupations are Retail Salespersons; Cashiers; Laborers and Freight, Stock, and Material Movers, Hand; Waiters and Waitresses; and Combined Food Preparation and Serving Workers. The top five fast-growing occupations are Home Health Aides; Residential Advisors; Medical Assistants; Medical Records and Health Information Technicians; and Social and Human Service Assistants.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. Nine of the top 10 are health occupations (e.g. anesthesiologists and surgeons). Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 36 selected high-demand, 30 selected fast-growing, and 50 selected high-earning occupations, only one high-earning occupation, General and Operations Managers, is in the high-demand category. Two computer software engineering occupations are both high-earning and fast-growing: Computer Software Engineers, Applications and Computer Software Engineers, Systems Software.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the county's economy by retaining, expanding, and attracting more high-wage providing industries.

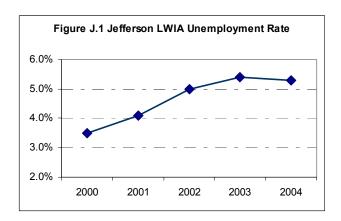
- The finding that basic skills are important—for high-demand, fast-growing, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising, strongly emphasizing the need to raise educational attainment in the county. Workforce and economic development should involve postsecondary and higher education institutions to address this issue. Higher incomes to graduates from these institutions would help to raise personal income for the county. Raising personal income by improving educational attainment for a county that has low population and labor force growth rates is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified county economy. Indeed, one cannot achieve success without the other.

# Workforce Supply

### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students and retirees). Jefferson County labor force information in Table J.1 shows the unemployment rate falling from 5.3 percent for 2004 to 4.6 percent in August 2005 as the number of employed residents grew faster than the labor force.

Annual unemployment rates for 2000 to 2004 are shown in Figure J.1. The county's unemployment rose from 3.5 percent in 2000 to 5.4 percent in 2003, as its number of employed residents fell faster than its labor force. The rate has been declining with employment gains in 2004 and 2005. Employment in the region averaged 383,500 quarterly from the second quarter of 2001 to third quarter 2004 (Figure J.2). The low point was recorded in the second quarter of 2003 but employment has been slowly recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.

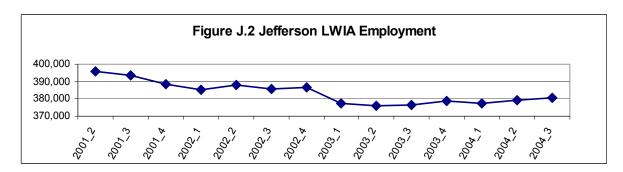


Source: Alabama Department of Industrial Relations.

Table J.1 Jefferson County LWIA Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Jefferson County	325,242	308,135	17,107	5.26%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Jefferson County	329,752	314,687	15,065	4.57%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

# **Commuting Patterns**

In 2000, more people commuted into the county for work than commuted out (Table J.2). Net commuter inflow was about 62,600. About 50,000 incommuters came from Shelby and St. Clair counties. The county has the opportunity to attract new residents or entice former residents to return. Table J.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 53 percent of workers, but more than 40 minutes for 8 percent, with nearly 1 percent exceeding one hour.

Table J.2 Jefferson LWIA Commuting Patterns

Area	Inflow, 2000 Outflow, 20			, 2000		
	Number	Percent		Number	Percent	
Jefferson County	89,409	100.0		26,788	100.0	
I	Average com	mute time	(o	ne-way), 2004	1	
				Percent of	workers	
Less	than 20 minut	tes		53.	.0	
20 to	0 to 40 minutes 35.4				.4	
40 m	40 minutes to an hour 7.2			.2		
More	More than an hour			0.	9	
Av	erage comm	ute distan	ce (	(one-way), 20	004	
				Percent of	workers	
Less than 10 miles				40.6		
10 to 25 miles			39.	1		
25 to	5 to 45 miles 12.2				2	
More	than 45 miles			3.	2	

Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

The commute is less than 10 miles for 41 percent of workers and 39 percent travel 10 to 25 miles. About 15 percent of workers travel more than 25 miles one-way, with roughly 3 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers and not slow economic development.

### **Population**

The Jefferson County population estimate of about 658,500 for 2004 is half a percent less than was recorded for 2000 (Figure J.3 and Table J.3). However, the region's population is projected to grow nearly 2 percent in this decade to almost 673,800 by 2010. This low projected population growth suggests that if employment growth continues its fast pace, in-commuting will be intensified and traffic congestion would worsen unless workers are persuaded to reside in the county. Cities and the county may need to invest in amenities and infrastructure to attract new residents.

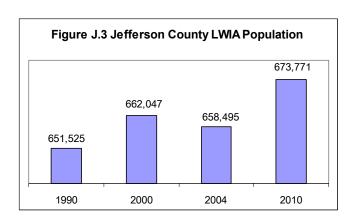


Table J.3 Jefferson County LWIA Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Jefferson County LWIA	651,525	662,047	658,495	-0.5	673,771	1.8
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

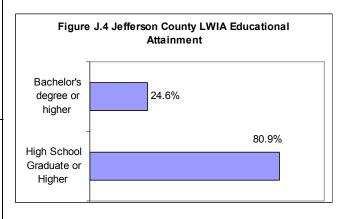
Educational attainment of Jefferson County residents who are 25 years old and over is shown below in Table J.4 and Figure J.4. About 81 percent graduated from high school and nearly a quarter hold bachelor's or higher degrees. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

### Per Capita Income

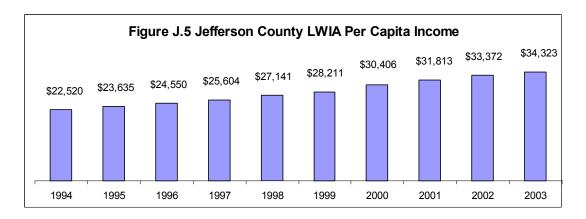
Jefferson County per capita income (PCI) was at \$34,323 in 2003 (Figure J.5). This PCI was up by about 52 percent from 1994. The county's 2003 PCI was also \$7,818 more than Alabama's \$26,505, almost 30 percent higher.

Table J.4 Educational Attainment in 2000, Population 25 Years and Over

	Jefferson County LWIA
Total	434,158
No schooling completed	4,227
Nursery to 4th grade	1,708
5th and 6th grade	5,904
7th and 8th grade	12,461
9th grade	11,360
10th grade	13,932
11th grade	14,635
12th grade, no diploma	18,723
High school graduate/equivalent	121,233
Some college, less than 1yr	27,914
Some college, 1+ yrs, no degree	70,628
Associate degree	24,600
Bachelor's degree	68,866
Master's degree	23,560
Professional school degree	10,532
Doctorate degree	3,875



Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

## Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. Experience requirements, starting wages and salary ranges, and signing bonuses in job ads suggest that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

The Jefferson County LWIA had an underemployment rate of 22.5 percent in 2004. Applying this rate to August 2005 labor force data means that about 70,800 employed residents were underemployed (Table J.5). Adding the unemployed gives a total available labor pool of about 85,900 for the county. This pool is 5.7 times the number of unemployed and is a more realistic measure of the available labor in the county. However, prospective employers must be prepared to offer the underemployed higher wages, better benefits or terms of employment, or some other incentives to induce them to

Table J.5 Available Labor

	Jefferson County LWIA
Labor Force	329,752
Employed	314,687
Underemployment rate	22.5%
Underemployed workers	70,805
Unemployed	15,065
Available labor pool	85,870

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

some other incentives to induce them to change jobs.

### **Workforce Demand**

### **Industry Mix**

The health care and social assistance sector was the leading employer with about 50,900 jobs in the second quarter of 2004, followed by retail trade with 162 fewer jobs (Table J.6). Rounding up the top five industries by employment are manufacturing, finance and insurance, and accommodation and food services. These five industries provided 188,551 jobs, about half of the county total.

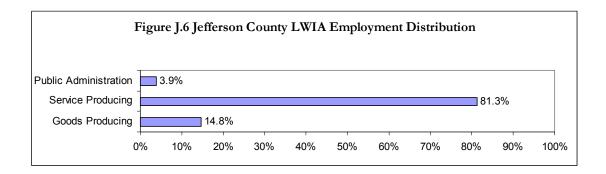
The average monthly wage across all industries in the county was \$3,107. Of the leading employers, retail trade and accommodation and food services paid less than this average; finance and insurance paid the highest with \$4,128. Overall, the highest average monthly wages were for utilities (\$5,528), mining (\$4,423), and professional, scientific, and technical services (\$4,322). Accommodation and food services paid the least at \$1,311. Utilities also had the highest average monthly new hire wages with \$3,847. Accommodation and food services paid the least again with \$957.

Table J.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

	Total			Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	85	0.02%	20	\$2,160	\$1,942
21 Mining	1,531	0.40%	19	\$4,423	\$3,660
22 Utilities	5,630	1.49%	16	\$5,528	\$3,847
23 Construction	23,245	6.15%	8	\$3,377	\$2,573
31-33 Manufacturing	30,909	8.18%	3	\$3,726	\$2,490
42 Wholesale Trade	22,638	5.99%	9	\$4,000	\$2,904
44-45 Retail Trade	50,764	13.43%	2	\$2,092	\$1,307
48-49 Transportation and Warehousing	10,131	2.68%	14	\$3,095	\$2,170
51 Information	11,685	3.09%	12	\$4,229	\$3,560
52 Finance and Insurance	29,287	7.75%	4	\$4,128	\$3,392
53 Real Estate and Rental and Leasing	6,185	1.64%	15	\$3,006	\$2,011
54 Professional, Scientific, and Technical Services	24,385	6.45%	7	\$4,322	\$2,879
55 Management of Companies and Enterprises	5,222	1.38%	17	\$4,234	\$2,346
56 Administrative and Support and Waste					
Management and Remediation Services	22,364	5.92%	10	\$2,061	\$1,513
61 Educational Services	26,205	6.93%	6	\$2,856	\$1,470
62 Health Care and Social Assistance	50,926	13.47%	1	\$3,126	\$2,218
71 Arts, Entertainment, and Recreation	3,708	0.98%	18	\$1,815	\$1,182
72 Accommodation and Food Services	26,665	7.05%	5	\$1,311	\$957
81 Other Services (except Public Administration)	11,600	3.07%	13	\$2,458	\$1,780
92 Public Administration	14,876	3.94%	11	\$3,240	\$2,026
ALL INDUSTRIES	378,041	100.00%		\$3,107	

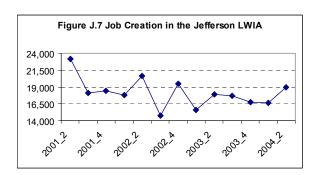
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

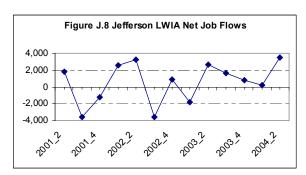
By broad industry classification, service producing industries provided 81 percent of jobs in second quarter 2004 (Figure J.6). Goods producing industries were next with about 15 percent and public administration 4 percent. This distribution is for all jobs in the county.



### Job Creation and Net Job Flows

On average, about 18,100 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure J.7 shows job creation on a downward trend over the period, but clearly rising in 2004. Quarterly net job flows averaged 544 in the same period (Figure J.8). Net job flows have ranged from a loss of about 3,500 to a gain of the same. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **High-Demand Occupations**

Table J.7 shows the top 36 of about 540 occupations ranked by projected demand for jobs. Many of these occupations are common to the leading employment sectors identified earlier: health care and social assistance; retail trade; manufacturing, finance and insurance, and accommodation and food services. These sectors will continue to dominate employment in the county. The top five high-demand occupations are Retail Salespersons; Cashiers; Laborers and Freight, Stock, and Material Movers, Hand; Waiters and Waitresses; and Combined Food Preparation and Serving Workers.

Table J.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annual Average Job Openings			
Occupation	Total	Due to Growth	Due to Separations	
Retail Salespersons	930	250	680	
Cashiers	930	215	715	
Laborers and Freight, Stock, and Material Movers, Hand	650	180	470	
Waiters and Waitresses	640	160	480	
Combined Food Preparation and Serving Workers	620	225	395	
Registered Nurses	520	295	225	
General and Operations Managers	470	200	270	
Office Clerks, General	465	170	295	
Customer Service Representatives	395	220	175	
Sales Representatives, Except Technical and Scientific Products	380	180	200	
Truck Drivers, Heavy and Tractor-Trailer	345	205	140	
Bookkeeping, Accounting, and Auditing Clerks	325	110	215	
Secretaries, Except Legal, Medical, and Executive	310	80	230	
Security Guards**	295	175	120	
First-Line Supervisors/Managers, Retail Sales	265	125	140	
Maids and Housekeeping Cleaners	255	145	110	
Janitors and Cleaners, Except Maids	255	125	130	
Nursing Aides, Orderlies, and Attendants	250	165	85	
Licensed Practical and Licensed Vocational Nurses**	250	140	110	
Teacher Assistants	230	130	100	
Receptionists and Information Clerks	230	130	100	
Accountants and Auditors	215	110	105	
First-Line Supervisors/Managers of Office and Administrative Support Workers	210	70	140	
Child Care Workers	210	90	120	
Elementary School Teachers, Except Special Education	180	95	85	
Maintenance and Repair Workers, General	180	85	95	
Landscaping and Groundskeeping Workers	165	75	90	
Executive Secretaries and Admin. Assistants	150	60	90	
Automotive Service Technicians and Mechanics	150	60	90	
Electricians	140	80	60	
Secondary School Teachers, Except Special Education	135	65	70	
Home Health Aides**	135	115	20	
Counter and Rental Clerks	125	55	70	
Truck Drivers, Light or Delivery Services	125	90	35	
Cooks, Institution and Cafeteria	125	50	75	
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific	125	55	70	

Note: A minimum of 125 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

### **Fast-Growing Occupations**

The top 30 of occupations ranked by projected growth of employment are listed in Table J.8. Forty percent of these occupations are in health or health support. The top five high growth occupations are Home Health Aides; Residential Advisors; Medical Assistants; Medical Records and Health Information Technicians; and Social and Human Service Assistants. Three occupations are both high-demand and fast-growing: Home Health Aides; Security Guards; and Licensed Practical and Licensed Vocational Nurses.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

Table J.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

	Emplo	yment	Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Home Health Aides**	1,640	2,790	70.1	5.46	135
Residential Advisors	160	250	56.3	4.56	15
Medical Assistants	1,080	1,670	54.6	4.46	80
Medical Records and Health Information Technicians	650	990	52.3	4.30	45
Social and Human Service Assistants	800	1,210	51.3	4.22	55
Computer Software Engineers, Systems Software	660	980	48.5	4.03	35
Network Systems and Data Communications Analysts	560	820	46.4	3.89	30
Physical Therapist Assistants	240	350	45.8	3.85	15
Fitness Trainers and Aerobics Instructors	700	1,020	45.7	3.84	45
Occupational Therapists	200	290	45.0	3.79	15
Dental Assistants	740	1,070	44.6	3.76	50
Preschool Teachers, Except Special Education	1,180	1,690	43.2	3.66	65
Dental Hygienists	540	770	42.6	3.61	30
Personal and Home Care Aides	830	1,170	41.0	3.49	50
Speech-Language Pathologists	230	320	39.1	3.36	15
Emergency Medical Technicians and Paramedics	590	820	39.0	3.35	30
Physical Therapists	340	470	38.2	3.29	20
Computer Software Engineers, Applications	1,130	1,560	38.1	3.28	55
Choreographers	160	220	37.5	3.24	15
Security Guards**	4,650	6,380	37.2	3.21	295
Database Administrators	330	450	36.4	3.15	15
Public Relations Managers	690	940	36.2	3.14	35
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,620	2,200	35.8	3.11	80
Directors, Religious Activities and Education	880	1,190	35.2	3.06	40
Aircraft Mechanics and Service Technicians	370	500	35.1	3.06	25
Production, Planning, and Expediting Clerks	1,140	1,540	35.1	3.05	70
Public Relations Specialists	430	580	34.9	3.04	20
Veterinary Assistants and Laboratory Animal Caretakers	460	620	34.8	3.03	25
Computer Support Specialists	1,870	2,520	34.8	3.03	90
Licensed Practical and Licensed Vocational Nurses**	4,100	5,510	34.4	3.00	250

Note: Selection criterion is an annual growth rate of at least 3.0 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

# **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table J.9 shows 50 selected highest earning occupations in the county. The selected high-earning occupations are mainly in health, legal, management, engineering, computer, science, and postsecondary education fields. Nine of the top 10 are health occupations. The selected high-earning occupations are generally not fast-growing or high-demand. Only one high-earning occupation, General and Operations Managers, is in the high-demand category. Two computer software engineering occupations are both high-earning and fast-growing: Computer Software Engineers, Applications and Computer Software Engineers, Systems Software.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

Table J.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Anesthesiologists	196,976
Surgeons	180,856
Obstetricians and Gynecologists	176,010
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Podiatrists	142,667
Psychiatrists	137,197
Chief Executives	135,304
Dentists, General	134,410
Law Teachers, Postsecondary	111,970
Lawyers	106,933
Engineering Managers	96,200
Physicists	93,974
Computer and Information Scientists, Research	90,459
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Aerospace Engineers	84,344
Mathematicians	83,366
Pharmacists	83,075
Actuaries	82,680
Optometrists	81,806
Real Estate Brokers	81,723
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Computer Hardware Engineers	
Sales Managers	79,414 78,957
Electronics Engineers, Except Computer	78,686
Securities, Commodities, and Financial Services Sales Agents	
	78,458
Environmental Engineers	76,960 76,704
Computer Software Engineers, Systems Software	76,794
Chemical Engineers	76,502
Materials Scientists	76,128 76,003
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	74,870
Atmospheric and Space Scientists	73,008
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Engineering Teachers, Postsecondary	72,320
Computer Software Engineers, Applications	71,698
Biochemists and Biophysicists	70,970
Mechanical Engineers	70,221
Education Administrators, Postsecondary	69,618
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers  Note: The list of accurations is execute to the region, but cornings are statewide. Only	67,163

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

### Other Workforce Issues

#### Available Labor

Employment is a critical input to economic development. Availability of labor is thus very important. Jefferson County has a large 85,900-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool is made up of about 70,800 underemployed and 15,100 unemployed. The county's underemployed workers are willing to commute farther and longer; 43 percent are prepared for 20 or more minutes longer and 45 percent will go 20 or more extra miles.

Low wages at available jobs, a lack of job opportunities in their areas, and child care and family responsibilities are the primary reasons given for being underemployed. Nonworkers cite retirement and disability as primary reasons for their status; a few also cite low wages at available jobs as a major reason. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could intensify incommuting, but also presents the county and its communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The county's population growth rate is very low compared to the state's and this is expected to continue through 2010. This presents a challenge to meeting increases in demand for workers. Another strategy to expand the labor force to meet this demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids). Table J.10 shows the percentage of selected occupations in Jefferson County that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance, making primary skills more important than others. A particular skill may be more important to and more extensively used in one occupation than another. Table J.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science is primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for critical thinking, complex problem solving, resource management, and

systems skills. These skills require longer training periods and postsecondary education. The county's high-demand and high-growth occupations are dominated by occupations such as Retail Salespersons; Cashiers; Combined Food Preparation and Serving Workers; Waiter and Waitresses; and Medical Assistants. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

Table J.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	•	•	-
Active Learning	36%	60%	76%
Active Listening	81%	83%	80%
Critical Thinking	58%	73%	94%
Learning Strategies	28%	30%	10%
Mathematics	25%	7%	42%
Monitoring	44%	40%	30%
Reading Comprehension	75%	93%	92%
Science	0%	3%	42%
Speaking	67%	80%	66%
Writing	42%	60%	46%
Complex Problem Solving Skills			
Complex Problem Solving	3%	20%	44%
Resource Management Skills			
Management of Financial Resources	3%	0%	14%
Management of Material Resources	3%	3%	2%
Management of Personnel Resources	8%	0%	12%
Time Management	50%	67%	44%
Social Skills			
Coordination	31%	47%	34%
Instructing	33%	57%	16%
Negotiation	6%	0%	12%
Persuasion	6%	7%	12%
Service Orientation	39%	40%	8%
Social Perceptiveness	44%	53%	6%
Systems Skills			
Judgment and Decision Making	19%	27%	78%
Systems Analysis	0%	7%	12%
Systems Evaluation	3%	0%	26%
Technical Skills			
Equipment Maintenance	11%	10%	0%
Equipment Selection	14%	13%	10%
Installation	11%	7%	0%
Operation and Control	8%	0%	6%
Operation Monitoring	6%	3%	4%
Operations Analysis	0%	10%	16%
Programming	0%	7%	6%
Quality Control Analysis	0%	3%	4%
Repairing	11%	3%	0%
Technology Design	0%	10%	8%
Troubleshooting	11%	20%	12%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

### **Education and Training Issues**

Educational attainment in Jefferson County is high compared to the state as a whole. Eighty-one percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, a quarter has bachelor's or higher degree; 19 percent of Alabamians do. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the county.

Table J.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Most of the fast-growing jobs require postsecondary vocational training at the minimum. Most of the high-demand jobs do not require postsecondary training. Short-term to moderate on-the-job training is the minimum requirement for most high-demand occupations.

Table J.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree			14
Doctoral Degree			4
Master's Degree		2	2
Work Experience Plus a Bachelor's or Higher Degree	1	1	13
Bachelor's Degree	3	7	16
Associate Degree	1	4	
Postsecondary Vocational Training	2	5	
Work Experience in a Related Occupation	2	1	1
Long-term On-the-job Training	1	1	
Moderate On-the-job Training	9	4	
Short-term On-the-job Training	17	5	

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. Long-term requires more than 12 months on-thejob training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. Moderate-term requires one to 12 months on-the-job experience and informal training. Short-term requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table J.10) presents a challenge for workforce development in the county. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the county's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting businesses that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher

educational systems to ensure a ready and available workforce for these businesses. The higher incomes to graduates of these institutions would help raise personal income for the county. Raising personal income by improving educational attainment and technological skills for a county that has low population and labor force growth rates is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified county economy. Indeed, one cannot achieve success without the other.

# WIAA Mobile Region Workforce Report





# **Summary**

- Mobile County had a 4.7 percent unemployment rate in August 2005, with about 8,540 unemployed. However, the county has a large 51,400-strong available labor pool that is looking for better jobs and includes 42,800 underemployed workers. The underemployed are willing to commute farther and longer. For the one-way commute, 55 percent are prepared for 20 or more minutes longer and 38 percent will go 20 or more extra miles.
- In 2000, 21,100 commuted into the county for work, compared to 13,200 residents who worked outside the county. About 60 percent of in-commuters came from Baldwin County and almost 40 percent of out-commuters work in Mississippi. The high level of commuting suggests that roads and highways must be maintained properly to ensure uninterrupted movement of workers and not slow economic development.
- The county's educational attainment is comparable to that for Alabama. Of the age 25 and over population, Alabama has 75 percent high school graduates and 19 percent bachelor's or higher degree holders, compared to about 77 percent and 19 percent, respectively, for the county.

- Employment is currently growing faster than the labor force and population. This can intensify commuter inflow. Workforce development initiatives that tackle this challenge might (i) focus on hard-to-serve populations (e.g. out-of-school youth and illiterate adults), (ii) help communities gain new residents, and (iii) facilitate in-commuting. Hard-to-serve populations are often outside of the mainstream economy, poor, and have difficulty finding work. They are potential labor force participants and some investment in training, transportation, child care, infrastructure, etc. may be needed to tap this resource. Increasing population is generally more beneficial to communities than in-commuting, but requires investment in amenities and infrastructure to support the growth. Facilitating in-commuting should be a short-term strategy.
- The top five employers in the county are: retail trade; health care and social assistance; educational services; manufacturing; and administrative and support and waste management and remediation services. They provided 85,569 jobs, about 53 percent of the county total in second quarter 2004. Manufacturing, educational services, and health care and social assistance all had average monthly wages that were above the \$2,633 countywide average.
- On average about 9,600 jobs were created per quarter from second quarter 2001 to second quarter 2004; quarterly net job flows averaged about 500. Job creation is the number of new jobs that are created either by new area businesses or through expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.
- Six occupations are both high-demand and fast-growing: Home Health Aides; Counter and Rental Clerks; Security Guards; Receptionists and Information Clerks; Customer Service Representatives; and Truck Drivers, Light or Delivery Services. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and Registered Nurses. The top five fast-growing occupations are Home Health Aides; Medical Assistants; Medical Records and Health Information Technicians; Social and Human Service Assistants; and Computer Software Engineers.
- The top 50 highest earning occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Of the top 10 occupations, six are health, three are management, and one is legal. Almost all high-earning occupations require bachelor's or higher degrees.
- Fast-growing or high-demand occupations are generally not high-earning. Of 34 selected high-demand, 33 selected fast-growing, and 50 selected high-earning occupations, only one high-earning occupation, General and Operations Managers, is in the high-demand category. Six occupations are both high-earning and fast-growing: Computer Software Engineers; Sales Managers; Computer and Information Systems Managers; Pharmacists; Management Analysts; and Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products.
- The most relevant skills for high-demand and fast-growing occupations are basic: active listening, reading comprehension, speaking, writing, and service orientation. High-demand and high-growth occupations are also common to the leading employment sectors. Economic development should aim to diversify and strengthen the county's economy by retaining, expanding, and attracting more high-wage providing industries.

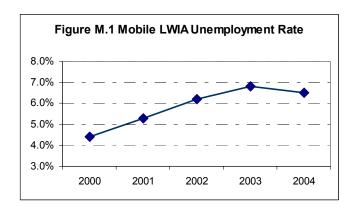
- The finding that basic skills are important—for high-demand, fast-growing, and high-earning jobs—indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skills as well as enhancing these basic skills. Employers should be an integral part of planning for training as they can help identify future skill needs and any existing gaps.
- Skill and education requirements for jobs keep rising, strongly emphasizing the need to raise educational attainment in the county. Workforce and economic development should involve postsecondary and higher education institutions to address this issue. Higher incomes to graduates from these institutions would help to raise personal income for the county. Raising personal income by improving educational attainment for a county that has low population and labor force growth rates is an effective economic development strategy.
- A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified county economy. Indeed, one cannot achieve success without the other.

# Workforce Supply

### **Labor Force Activity**

The labor force includes all persons in the civilian noninstitutional population who are age 16 and over and who have, or are actively looking for, a job. Typically, those who have no job and are not looking for one are not included (e.g. students and retirees). Mobile County labor force information in Table M.1 shows the unemployment rate falling from 6.5 percent for 2004 to 4.7 percent in August 2005 as the number of employed residents grew much faster than the labor force.

Annual unemployment rates for 2000 to 2004 are shown in Figure M.1. The county's unemployment rose from 4.4 percent in 2000 to 6.8 percent in 2003 reflecting the effects of the last economic recession. The rate has been declining with employment gains in 2004 and 2005. Employment in the region averaged 164,000 quarterly from the second quarter of 2001 to third quarter 2004 (Figure M.2). The low point was recorded in the first quarter of 2004 but employment has been recovering with increasing economic activity. Employment refers to the number of full-time and part-time jobs.

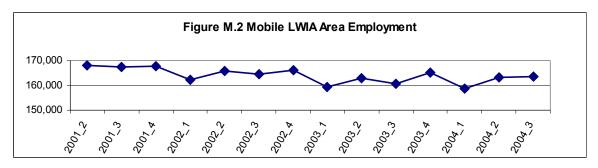


Source: Alabama Department of Industrial Relations.

Table M.1 Mobile County LWIA Labor Force Information

		2004		
	Labor Force	Employed	Unemployed	Rate
Mobile County	180,685	168,929	11,756	6.51%
Alabama	2,148,766	2,029,314	119,452	5.56%
U.S.	147,401,000	139,252,000	8,149,000	5.53%
		2005 August		
	Labor Force	Employed	Unemployed	Rate
Mobile County	182,636	174,094	8,542	4.68%
Alabama	2,155,745	2,065,528	90,217	4.18%
U.S.	150,469,000	143,142,000	7,327,000	4.87%

Source: Alabama Department of Industrial Relations and U.S. Bureau of Labor Statistics.



Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

## **Commuting Patterns**

In 2000, more people commuted into the county for work than commuted out (Table M.2). Net commuter inflow was about 7,900. About 60 percent of in-commuters came from Baldwin County and almost 40 percent of out-commuters work in Mississippi. Table M.2 also shows the one-way average commute time and distance for workers in 2004; the data were collected as part of a survey on underemployment. The one-way commute takes less than 20 minutes for 59 percent of residents and between 20 and 40 minutes for almost 28 percent. Roughly 8 percent take more than 40 minutes, with 3.4 percent exceeding one hour.

Table M.2 Mobile LWIA Commuting Patterns

Area	Inflow, 2000			Outflow	, 2000
	Number	Percent		Number	Percent
Mobile County	21,092	100.0		13,228	100.0
I	Average com	mute time	(o	ne-way), 2004	1
				Percent of	workers
Less	than 20 minut	es		59	.3
20 to	40 minutes			27	.6
40 m	inutes to an he	our		4	.1
More than an hour		3.4			
Av	erage comm	ute distano	ce (	(one-way), 20	004
				Percent of	workers
Less than 10 miles			47.0		
10 to 25 miles			33.2		
25 to 45 miles			9.3		
More than 45 miles			6	.3	

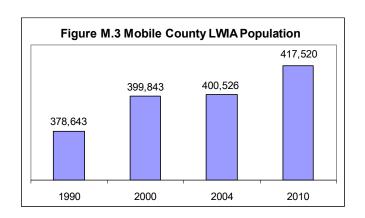
Note: Rounding errors may be present.

Source: U.S. Census Bureau and Alabama Department of Industrial Relations.

The commute is less than 10 miles for 47 percent of workers and 33 percent travel 10 to 25 miles. About 16 percent of workers travel more than 25 miles one-way, with 6.3 percent exceeding 45 miles. This commuting data suggest that roads and highways must be maintained properly to ensure uninterrupted movement of workers and not slow economic development.

### **Population**

The Mobile County population estimate of about 400,526 for 2004 is little changed from what was recorded for 2000 (Figure M.3 and Table M.3). However, the region's population is projected to grow 4.4 percent in this decade to almost 418,000 by 2010. This low projected population growth suggests that in-commuting will be intensified if employment growth continues its fast pace. Communities should rather persuade in-commuters to become county residents. Some investment in amenities



and infrastructure may be needed to attract new residents.

Table M.3 Mobile County LWIA Population

	1990	2000	2004	% Change	2010	% Change
	Census	Census	Estimate	2000-2004	Projected	2000-2010
Mobile County LWIA	378,643	399,843	400,526	0.2	417,520	4.4
Alabama	4,040,587	4,447,100	4,530,182	1.9	4,838,812	8.8
U.S.	248,709,873	281,421,966	296,655,404	5.4	314,571,000	11.8

Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.

#### **Educational Attainment**

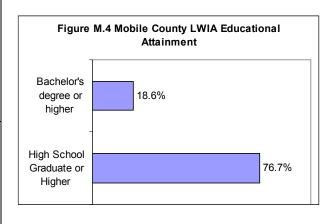
Educational attainment of Mobile County residents who are 25 years old and over is shown below in Table M.4 and Figure M.4. About 77 percent graduated from high school and nearly 19 percent hold bachelor's or higher degrees. Educational attainment is important as skills rise with education and high wage 21st century jobs demand more skill sets.

### Per Capita Income

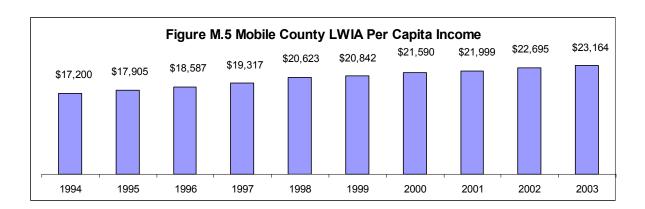
Mobile County per capita income (PCI) was at \$23,164 in 2003 (Figure M.5). This PCI was up by about 35 percent from 1994. The county's 2003 PCI was also \$3,342 less than Alabama's \$26,505, almost 13 percent lower.

Table M.4 Educational Attainment in 2000, Population 25 Years and Over

	Mobile County LWIA
Total	250,122
No schooling completed	3,033
Nursery to 4th grade	1,564
5th and 6th grade	3,279
7th and 8th grade	8,846
9th grade	7,988
10th grade	10,421
11th grade	10,826
12th grade, no diploma	12,266
High school graduate/equivalent	79,822
Some college, less than 1yr	16,388
Some college, 1+ yrs, no degree	35,788
Associate degree	13,276
Bachelor's degree	30,499
Master's degree	10,782
Professional school degree	3,586
Doctorate degree	1,758



Source: Center for Business and Economic Research, The University of Alabama and U.S. Census Bureau.



Source: U.S. Bureau of Economic Analysis and Center for Business and Economic Research, The University of Alabama.

### Underemployment and Available Labor

Labor force data are often limited to information on the employed and the unemployed that is available from government sources. However, this information is not complete from the perspective of employers. New or expanding employers are also interested in underemployment because current workers are potential employees. Experience requirements, starting wages and salary ranges, and signing bonuses in job ads suggest that many prospective employers look beyond the unemployed for workers.

Workers in occupations that underutilize their experience, training, and skills are underemployed. These workers might look for other work because their current earnings are below what they believe they can get or because they wish to not be underemployed. Underemployment occurs for various reasons including (i) productivity growth, (ii) spousal employment and income, and (iii) family constraints or personal preferences. The various contributing factors combined with economic, social, and geographic characteristics of areas make underemployment unique to areas.

The existence of underemployment identifies economic potential that is not being realized. It is extremely difficult to measure this economic potential because of uncertainties regarding additional income that the underemployed can bring to an area. It is clear, however, that underemployment provides opportunities for selective job creation and economic growth. A business that needs skills prevalent among the underemployed could locate in WIAAs with such workers regardless of those areas' unemployment rates. A low unemployment rate, which may falsely suggest limited labor availability, is not a hindrance to the business.

The underemployed present a significant pool of labor because they tend to respond to job opportunities that they believe are better for reasons that include (i) higher income, (ii) better benefits, (iii) better terms and conditions of employment, and (iv) better match with skills, training, and experience. The underemployed also create opportunities for entry level workers as they leave lower-paying jobs for better-paying ones. Even if their previously held positions are lost or not filled (perhaps due to low unemployment), there is economic growth in gaining higher-paying jobs. Such income growth boosts consumption, savings, and tax collections. Quantifying the size of the underemployed is a necessary first step in exploiting it for economic development, workforce training, planning, and other uses.

The Mobile County LWIA had an underemployment rate of 24.6 percent in 2004. Applying this rate to August 2005 labor force data means that about 42,800 employed residents were underemployed (Table M.5). Adding the unemployed gives a total available labor pool of about 51,400 for the county. This pool is six times the number of unemployed and is a more realistic measure of the available labor in the county. However, prospective employers must be prepared to offer the underemployed higher wages, better benefits or terms of employment, or

Table M.5 Available Labor

	Jefferson County LWIA
Labor Force	182,636
Employed	174,094
Underemployment rate	24.6%
Underemployed workers	42,827
Unemployed	8,542
Available labor pool	51,369

Note: Rounding errors may be present. Based on August 2005 labor force data and 2004 underemployment rates.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

some other incentives to induce them to change jobs.

### **Workforce Demand**

### **Industry Mix**

The retail trade sector was the leading employer with about 22,200 jobs in the second quarter of 2004, followed by health care and social assistance with almost 18,900 jobs (Table M.6). Rounding up the top five industries by employment are educational services, manufacturing, and administrative and support and waste management and remediation services. These five industries provided 85,569 jobs, about 53 percent of the county total.

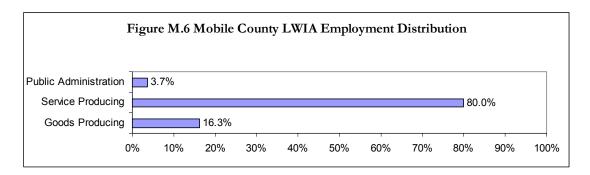
The average monthly wage across all industries in the county was \$2,633. Three of the leading employers--manufacturing, educational services, and health care and social assistance paid more than this average. Overall, the highest average monthly wages were for mining (\$5,144), utilities (\$4,171), and professional, scientific and technical services (\$3,555). Accommodation and food services paid the least at \$1,105. Mining also had the highest average monthly new hire wages with \$4,564. Accommodation and food services paid the least again with \$804.

Table M.6 Industry Mix (2<sup>nd</sup> Quarter 2004)

	Total			Average Monthly	Average Monthly New
Industry by 2-digit NAICS Code	Employment	Share	Rank	Wage	Hire Earnings
11 Agriculture, Forestry, Fishing and Hunting	893	0.55%	18	\$2,283	\$1,691
21 Mining	443	0.27%	19	\$5,144	\$4,564
22 Utilities	1,667	1.03%	16	\$4,171	\$2,882
23 Construction	9,862	6.09%	7	\$2,693	\$1,990
31-33 Manufacturing	15,197	9.39%	4	\$3,499	\$2,046
42 Wholesale Trade	8,532	5.27%	9	\$3,521	\$2,674
44-45 Retail Trade	22,247	13.74%	1	\$1,987	\$1,337
48-49 Transportation and Warehousing	7,130	4.40%	10	\$3,205	\$2,242
51 Information	2,615	1.62%	15	\$3,110	\$2,199
52 Finance and Insurance	5,511	3.40%	13	\$3,551	\$2,862
53 Real Estate and Rental and Leasing	3,946	2.44%	14	\$2,388	\$1,636
54 Professional, Scientific, and Technical Services	8,726	5.39%	8	\$3,555	\$2,556
55 Management of Companies and Enterprises	398	0.25%	20	\$2,773	\$1,997
56 Administrative and Support and Waste					
Management and Remediation Services	13,419	8.29%	5	\$2,044	\$1,363
61 Educational Services	15,828	9.78%	3	\$2,912	\$1,693
62 Health Care and Social Assistance	18,878	11.66%	2	\$2,819	\$1,837
71 Arts, Entertainment, and Recreation	1,423	0.88%	17	\$1,469	\$914
72 Accommodation and Food Services	13,353	8.25%	6	\$1,105	\$804
81 Other Services (except Public Administration)	5,814	3.59%	12	\$1,927	\$1,427
92 Public Administration	6,014	3.71%	11	\$2,359	\$1,471
ALL INDUSTRIES	161,896	100.00%		\$2,633	

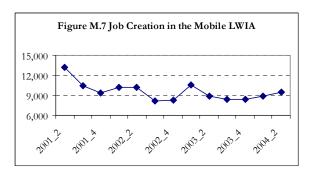
Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

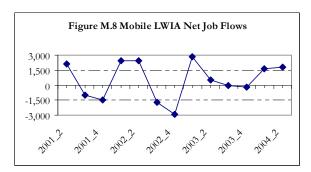
By broad industry classification, service producing industries provided 80 percent of jobs in second quarter 2004 (Figure M.6). Goods producing industries were next with about 16 percent and public administration 4 percent. This distribution is for jobs in the county.



### Job Creation and Net Job Flows

On average, about 9,600 jobs were created per quarter from second quarter 2001 to second quarter 2004. Figure M.7 shows job creation on a downward trend over the period, but clearly rising in 2004. Quarterly net job flows averaged 544 in the same period (Figure M.8). Net job flows have ranged from a loss of about 2,900 to a gain of the same. Job creation refers to the number of new jobs that are created either by new area businesses or through the expansion of existing firms. Net job flows reflect the difference between current and previous employment at all businesses.





Source: Alabama Department of Industrial Relations and U.S. Census Bureau.

### **High-Demand Occupations**

Table M.7 shows the top 34 of about 490 occupations ranked by projected demand for jobs. Many of these occupations are common to the leading employment sectors identified earlier: retail trade; health care and social assistance; educational services, manufacturing, and administrative and support and waste management and remediation services. These sectors will continue to dominate employment in the county. The top five high-demand occupations are Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiters and Waitresses; and Registered Nurses.

Table M.7 Selected High-Demand Occupations (Base Year 2002 & Projected Year 2012)

	Annual Average Job Openings			
Occupation	Total	Due to Growth	Due to Separations	
Cashiers	325	45	280	
Retail Salespersons	280	55	225	
Combined Food Preparation and Serving Workers	210	60	150	
Waiters and Waitresses	195	25	170	
Registered Nurses	180	90	90	
General and Operations Managers	150	50	100	
Office Clerks, General	150	45	105	
Truck Drivers, Heavy and Tractor-Trailer	140	80	60	
Laborers and Freight, Stock, and Material Movers, Hand	140	15	125	
Secretaries, Except Legal, Medical, and Executive	105	15	90	
Sales Representatives, Except Technical and Scientific Products	105	40	65	
Janitors and Cleaners, Except Maids	100	40	60	
First-Line Supervisors/Managers, Retail Sales	100	35	65	
Bookkeeping, Accounting, and Auditing Clerks	95	20	75	
Security Guards**	90	45	45	
Customer Service Representatives**	80	45	35	
Licensed Practical and Licensed Vocational Nurses	75	30	45	
Receptionists and Information Clerks**	70	35	35	
Nursing Aides, Orderlies, and Attendants	70	35	35	
Child Care Workers	70	20	50	
Teacher Assistants	70	25	45	
Maids and Housekeeping Cleaners	65	25	40	
Elementary School Teachers, Except Special Education	60	20	40	
First-Line Supervisors/Managers of Office and Administrative Support Workers	60	15	45	
Welders, Cutters, Solderers, and Brazers	60	25	35	
Electricians	55	30	25	
Maintenance and Repair Workers, General	55	20	35	
Truck Drivers, Light or Delivery Services**	55	40	15	
Secondary School Teachers, Except Special Education	50	15	35	
Home Health Aides**	50	40	10	
Counter and Rental Clerks**	50	20	30	
Accountants and Auditors	50	20	30	
Carpenters	50	20	30	
Automotive Service Technicians and Mechanics	50	15	35	

Note: A minimum of 50 average annual job openings is used as selection criterion and data are rounded to nearest 5.

Source: Alabama Department of Industrial Relations.

## **Fast-Growing Occupations**

The top 33 of occupations ranked by projected growth of employment are listed in Table M.8. The top three fast-growing occupations are in health or health support. The top five high growth occupations are Home Health Aides; Medical Assistants; Medical Records and Health Information Technicians; Social and Human Service Assistants; and Computer Software Engineers, Applications. Six occupations are both high-demand and fast-growing: Home Health Aides; Counter and Rental Clerks; Security Guards; Receptionists and Information Clerks; Customer Service Representatives; and Truck Drivers, Light or Delivery Services.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

Table M.8 Selected Fast-Growing Occupations (Base Year 2002 & Projected Year 2012)

Table Mio Selected Last Glowing Occupations (D	Employ		Percent	Annual Growth	Total Annual Average Job
Occupation	2002	2012	Change	(Percent)	Openings
Home Health Aides**	850	1,250	47.1	3.93	50
Medical Assistants	270	390	44.4	3.75	15
Medical Records and Health Information Technicians	370	530	43.2	3.66	20
Social and Human Service Assistants	370	510	37.8	3.26	20
Computer Software Engineers, Applications	230	310	34.8	3.03	10
Computer Support Specialists	550	740	34.5	3.01	25
Personal and Home Care Aides	870	1,170	34.5	3.01	45
Choreographers	120	160	33.3	2.92	10
Pharmacy Technicians	280	370	32.1	2.83	15
Pharmacists	350	460	31.4	2.77	15
Aircraft Mechanics and Service Technicians	***	***	***	***	***
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	710	920	29.6	2.62	30
Training and Development Specialists	240	310	29.2	2.59	10
Production, Planning, and Expediting Clerks	450	580	28.9	2.57	25
Dental Assistants	280	360	28.6	2.54	20
Human Resources Managers	210	270	28.6	2.54	10
Telecommunications Line Installers and Repairers	110	140	27.3	2.44	10
Counter and Rental Clerks**	780	990	26.9	2.41	50
Security Guards**	1,790	2,240	25.1	2.27	90
Preschool Teachers, Except Special Education	440	550	25.0	2.26	15
Maintenance Workers, Machinery	160	200	25.0	2.26	10
Public Relations Managers	240	300	25.0	2.26	10
Rehabilitation Counselors	120	150	25.0	2.26	10
Management Analysts	450	560	24.4	2.21	15
Receptionists and Information Clerks**	1,410	1,750	24.1	2.18	70
Computer and Information Systems Managers	210	260	23.8	2.16	10
Directors, Religious Activities and Education	340	420	23.5	2.14	10
Customer Service Representatives**	1,840	2,270	23.4	2.12	80
Child, Family, and School Social Workers	220	270	22.7	2.07	10
Truck Drivers, Light or Delivery Services**	1,810	2,220	22.7	2.06	55
Sales Reps., Wholesale and Manufacturing, Technical and Scientific Products	620	760	22.6	2.06	30
Human Resources Assistants, Exc. Payroll and Timekeeping	180	220	22.2	2.03	10
Sales Managers	450	550	22.2	2.03	20

Note: Selection criterion is an annual growth rate of at least 2.0 percent. Employment level data are rounded to the nearest 10 and job openings data are rounded to the nearest 5.

Source: Alabama Department of Industrial Relations.

### **High-Earning Occupations**

Any discussion of earnings must consider that wages vary with experience. Occupations with the highest entry wages may not necessarily have the highest average or experienced wages. Table M.9 shows 50 selected highest earning occupations in the county. These occupations are mainly in health, legal, management, engineering, computer, and postsecondary education fields. Of the top 10 occupations, six are health, three are management, and one is legal. Only one high-earning occupation, General and Operations Managers, is in the high-demand category. Six occupations are both high-earning and fast-growing: Computer Software Engineers, Applications; Sales Managers; Computer and Information Systems Managers; Pharmacists; Management Analysts; and Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products.

<sup>\*\*</sup> Qualify as both high-demand and fast-growing occupations.

<sup>\*\*\*</sup> The data for these occupations are confidential using Bureau of Labor Statistics standards.

Table M.9 Selected High-Earning Occupations

Occupation	Mean Annual Salary (\$)
Surgeons	180,856
Obstetricians and Gynecologists	176,010
Internists, General	169,749
Family and General Practitioners	146,370
Pediatricians, General	144,581
Chief Executives	135,304
Dentists, General	134,410
Lawyers	106,933
Engineering Managers	96,200
Natural Sciences Managers	88,795
Personal Financial Advisors	88,046
General and Operations Managers	85,821
Pharmacists	83,075
Chiropractors	82,514
Optometrists	81,806
Computer and Information Systems Managers	81,078
Health Specialties Teachers, Postsecondary	80,930
Marketing Managers	79,435
Computer Hardware Engineers	79,414
Sales Managers	78,957
Securities, Commodities, and Financial Services Sales Agents	78,458
Environmental Engineers	76,960
Chemical Engineers	76,502
Financial Managers	76,003
Airline Pilots, Copilots, and Flight Engineers	
Materials Engineers	74,870
	73,382
Medical and Health Services Managers	72,925
Electrical Engineers	72,904
Purchasing Managers	72,488
Petroleum Engineers	71,906
Computer Software Engineers, Applications	71,698
Mechanical Engineers	70,221
Industrial Production Managers	69,056
Management Analysts	68,806
Veterinarians	68,619
Construction Managers	67,163
Sales Engineers	66,934
Computer Programmers	66,789
Operations Research Analysts	66,518
Physics Teachers, Postsecondary	65,710
Computer Systems Analysts	65,250
Industrial Engineers	65,125
Aerospace Engineering and Operations Technicians	65,000
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	64,979
Economics Teachers, Postsecondary	64,560
Commercial Pilots	64,020
Architects, Except Landscape and Naval	63,627
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	63,502
Clinical, Counseling, and School Psychologists	63,253
Civil Engineers	63,190

Note: The list of occupations is specific to the region, but earnings are statewide. Only the 50 highest earning single occupations are presented. The list does not include occupations that are affected by confidentiality. Some high-earning occupational groups are not listed because earnings can vary considerably for occupations within these groups. Employment data are rounded to the nearest 10. The data provided are based on the November 2004 release of the Occupational Employment Statistics (OES) combined employment and wage file. Estimates for specific occupations may include imputed data.

Source: Center for Business and Economic Research, The University of Alabama and Alabama Department of Industrial Relations.

<sup>&</sup>quot;NA" indicates data items that are not publishable or not available.

### Other Workforce Issues

#### Available Labor

Employment is a critical input to economic development. Availability of labor is thus very important. Mobile County has a large 51,400-strong available labor pool that is looking for better jobs, typically higher-wage ones. This pool includes about 42,800 underemployed workers who are willing to commute farther and longer; 55 percent are prepared for 20 or more minutes longer and 38 percent will go 20 or more extra miles.

A lack of job opportunities in their areas, low wages at available jobs, and child care and family responsibilities are the primary reasons given for being underemployed. Nonworkers cite disability and retirement as primary reasons for their status; a few also cite low wages at available jobs as a major reason. Some nonworkers may become part of the labor force if their problems can be addressed. Economic development efforts should take these factors into consideration.

Employment is growing faster than the labor force. Higher employment demand could intensify incommuting, but also presents the county and its communities with opportunities to attract new residents. Some communities must be prepared to invest in amenities and infrastructure to support such growth because immigration is generally more beneficial to communities than in-commuting.

Immigration is one way of growing the labor force through growth in the population. The county's population growth rate is very low compared to the state's and this is expected to continue through 2010. This presents a challenge to meeting increases in demand for workers. Another strategy to expand the labor force to meet this demand is to focus on hard-to-serve populations, which include persons in poverty, those receiving welfare, those in sparsely populated areas, those on active parole, and out-of-school youth. These people are often outside of the mainstream economy and poor. They usually have difficulty finding work because they have low levels of educational attainment, lack occupational skills, or face geographic or other barriers. Some investment in training, transportation, child care, infrastructure, etc. may be needed to tap these potential workers.

#### **Skills**

Jobs require skill sets and it is necessary that jobholders have the relevant skills. High earning occupations typically require more complex skills, which are obtained in the pursuit of the high educational attainment levels that such jobs require. Low earning occupations require fewer and more basic skill sets; some such occupations have no minimum skill set requirements (e.g. dishwashers and maids). Table M.10 shows the percentage of selected occupations in Mobile County that list a particular skill as primary. We define a primary skill as one in the top 10 of the required skill set for an occupation. O\*NET Online provides skill sets for all occupations ranked by the degree of importance, making primary skills more important than others. A particular skill may be more important to and more extensively used in one occupation than another. Table M.10 does not address such cross-occupational skill importance comparisons.

In general, basic skills are most frequently listed as primary. Science is primary for more selected high-earning occupations than selected fast-growing and selected high-demand occupations. A similar pattern holds for critical thinking, mathematics, complex problem solving, resource

management, and systems skills. These skills require longer training periods and postsecondary education. The county's high-demand and high-growth occupations are dominated by occupations such as Cashiers; Retail Salespersons; Combined Food Preparation and Serving Workers; Waiter and Waitresses; Home Health Aides; and Medical Assistants. The most relevant skills for such occupations are active listening, reading comprehension, speaking, writing, and service orientation.

Table M.10 Share of Selected Occupations for Which Skill Is Primary

	Selected High-Demand Occupations	Selected Fast-Growing Occupations	Selected High-Earning Occupations
Basic Skills	•	-	-
Active Learning	35%	39%	66%
Active Listening	85%	79%	82%
Critical Thinking	62%	55%	94%
Learning Strategies	29%	27%	10%
Mathematics	26%	21%	42%
Monitoring	44%	30%	30%
Reading Comprehension	76%	85%	92%
Science	0%	3%	42%
Speaking	68%	76%	60%
Writing	41%	58%	40%
Complex Problem Solving Skills			
Complex Problem Solving	3%	15%	40%
Resource Management Skills			
Management of Financial Resources	3%	3%	12%
Management of Material Resources	3%	3%	2%
Management of Personnel Resources	9%	3%	10%
Time Management	50%	52%	42%
Social Skills			
Coordination	26%	24%	32%
Instructing	35%	39%	22%
Negotiation	6%	6%	14%
Persuasion	6%	6%	14%
Service Orientation	35%	36%	14%
Social Perceptiveness	47%	48%	12%
Systems Skills			
Judgment and Decision Making	24%	24%	70%
Systems Analysis	0%	6%	12%
Systems Evaluation	3%	6%	26%
Technical Skills			
Equipment Maintenance	12%	12%	2%
Equipment Selection	15%	12%	2%
Installation	15%	9%	2%
Operation and Control	12%	9%	8%
Operation Monitoring	6%	6%	6%
Operations Analysis	3%	6%	24%
Programming	0%	3%	8%
Quality Control Analysis	3%	9%	6%
Repairing	15%	9%	0%
Technology Design	0%	6%	12%
Troubleshooting	12%	15%	14%

Note: Definitions for skill types and skills are available at http://online.onetcenter.org/skills/

Source: O\*NET Online and Center for Business and Economic Research, The University of Alabama.

### **Education and Training Issues**

Educational attainment in Mobile County is comparable to the state as a whole. Seventy-seven percent of residents age 25 and over have graduated from high school, compared to 75 percent for Alabama. Of that population, nearly 19 percent have bachelors or higher degree; 19 percent of Alabamians do. Skill and education requirements for jobs keep rising and emphasize a strong need to raise educational attainment in the county.

Table M.11 shows the number of selected occupations in the region for which a particular education/training category is most common. In general, high-earning occupations require high educational attainment levels, typically a bachelor's or higher degree. Several fast-growing jobs require postsecondary vocational training at the minimum. Most of the high-demand jobs require short-term to moderate on-the-job training.

Table M.11 Number of Selected Occupations with Most Common Education/Training Requirement

	Selected High-Demand	Selected Fast-Growing	Selected High-Earning
Most Common Education/Training Requirements Categories	Occupations	Occupations	Occupations
First Professional Degree	0	1	11
Doctoral Degree	0	0	3
Master's Degree	0	1	2
Work Experience Plus a Bachelor's or Higher Degree	1	5	11
Bachelor's Degree	3	4	20
Associate Degree	1	2	1
Postsecondary Vocational Training	2	2	1
Work Experience in a Related Occupation	2	1	0
Long-term On-the-job Training	3	2	0
Moderate On-the-job Training	6	6	1
Short-term On-the-job Training	16	9	0

Note: The last three education and training requirements categories are based on the length of time it generally takes an average worker to achieve proficiency for occupations in which postsecondary training is usually not needed for entry. Long-term requires more than 12 months on-thejob training that can include up to four years of apprenticeship, formal classroom instruction, and short-term employer-sponsored training. Trainees are generally considered to be employed in the occupation. Moderate-term requires one to 12 months on-the-job experience and informal training. Short-term requires up to one month on-the-job experience and training.

Source: O\*NET Online; Center for Business and Economic Research, The University of Alabama; and Alabama Department of Industrial Relations.

The finding that basic skills are important for all the selected occupations (Table M.10) presents a challenge for workforce development in the county. It indicates a strong need for training in these skills. Ideally, all high school graduates should possess basic skills so that postsecondary and higher education can focus on other and more complex skill types while enhancing basic skills. Employers should be an integral part of planning for training as they can point out the skill needs of the future and any existing gaps.

High-earning occupations make up a small component of total employment and jobs offered by top employers in the region. Diversifying the county's economy would strengthen it. Economic development should also focus on retaining, expanding, and attracting industries that provide more high-earning jobs. Workforce development should pay attention to postsecondary and higher educational systems to ensure a ready and available workforce for these businesses. The higher

incomes to graduates of these institutions would help raise personal income for the county. Raising personal income by improving educational attainment and technological skills for a county that has low population and labor force growth rates is an effective economic development strategy.

A highly educated and productive workforce is a critical economic development asset. Together, workforce development and economic development can provide this asset and build a strong well-diversified county economy. Indeed, one cannot achieve success without the other.